US Army Corps
of Engineers
Alaska District

Public Notice of Application for Permit

Regulatory Branch (1145)
3437 Airport Way
Suite 206
Fairbanks, Alaska 99709-4777

PUBLIC NOTICE DATE: March 17, 2006

EXPIRATION DATE: May 1, 2006

REFERENCE NUMBER: POA-2005-614-4

WATERWAY NUMBER: Jarvis Creek

Interested parties are hereby notified that an application has been received for a Department of the Army permit for certain work in waters of the United States as described below and shown on the attached plan.

APPLICANT: Mr. Thomas Glaze, United States Army Alaska, Directorate of Public Works, 724 Postal Service Loop #4500, Fort Richardson, Alaska 99505-4500

LOCATION: Legal descriptions from USGS Quad maps Mt. Hayes D-4 and Big Delta A-4 for construction locations of the Combat Training Facility components (Fairbanks Meridian):

Battle Area Complex

Township	Range	Sections
T11S	R11E	21, 22, 27, 28, 29, 33, 34

Approximately Latitude 63° 56′ N., Longitude 145° 36′ W.

Combined Arms Collective Training Facility

Township	Range	Sections
T11S	R11E	8, 17

Approximately Latitude 63° 58′ N., Longitude 145° 38′ W.

WORK: The project involves the placement of approximately 170,000 cubic yards of fill into 26 acres of waters of the United States wetlands, for construction of a Combat Training Facility (CTF) which includes a Battle Area Complex (BAX) (Sheet 4 of 27) and a Combined Arms Collective Training Facility (CACTF) (Sheet 5 of 27). The construction of the combat training facility is in accordance with the attached plans; sheets 1-27 dated March 2006.

PURPOSE: United States Army Alaska (USARAK) proposes to construct and to operate a state-of-the-art, fully automated and instrumented CTF on Donnelly Training Area, (DTA) Alaska.

ADDITIONAL INFORMATION: The CTF range designs include the construction of a larger BAX, with a Range Operations and Control Area (ROCA), and the smaller CACTF. These facilities would support a wide range of training exercises under realistic rural and urban combat conditions for up to 1,000 personnel and 170 combat vehicles per training event. These components are listed in detail below.

Battle Area Complex (BAX)

This is the rural portion designed for individual vehicle gunnery training and qualification of vehicle-mounted weapon systems, and weapons training on foot. The BAX will provide a useable range area for free maneuver of approximately 3,500 acres.

The BAX design includes two hardened course roads, stationary and moving armor and infantry targets, machine gun bunkers, breaching obstacles, and indirect fire simulation devices. All targets would be fully automated, and would be computer operated and scored from a centralized control facility.

The BAX portion of the design also includes an adjacent joint-use ROCA, which will include a fenced ammunition breakdown building with a loading dock, fenced operations and storage building, restroom facilities, an enclosed observation area, a covered cooking area, building information systems, a water system, and storm drainage features.

Clearing will be conducted in some locations for line-of-sight from firing points to targets. Not all of the vegetation would be cleared in order to maintain varying degrees of natural overhead protection and concealment and to provide natural topography. Within this permit application, clearing is defined as the mechanical cutting or shearing of large, woody vegetation to within 6 inches of ground level, and leaving the surface organic material and ground intact.

The footprints of the range roads, ditches, buildings, targets and other permanent facilities will be cleared and grubbed. Grubbing will include the mechanical clearing of vegetation and the removal and disposal of stumps, large roots, and other debris not suitable for foundation purposes to a depth of not less than 18 inches. This overburden material will be mechanically sorted so that the plant materials can be chipped and used on the side slopes of the targets for stabilization and to protect against ammunition ricochet. The remaining non-organic materials will be back-hauled to the gravel pit for disposal, which is an upland location.

A fuel break will be constructed along the northern end of the BAX area (Sheet 6 of 27). It will utilize existing clearings, Jarvis Creek and previously burned areas as much as possible. The rest of the fuel break will be a 75-foot wide clearing using a hydroaxe in the black spruce and other forest types. This fuel break will cross 4 sections of wetlands (for a total of 2962 feet by 75 feet, or 5.1 acres), which may experience disturbance to the organic mat and/or ground.

Combined Arms Collective Training Facility (CACTF)

This is the urban component of the range complex that will contain several structures designed to provide a high level of urban combat training realism and effectiveness. This facility would support mounted (by vehicle) and dismounted (on foot) training operations. The CACTF requires approximately 1,100 acres of land suitable for construction of buildings and support features.

The CACTF design would include electrical service, site improvements, such as curbs, drainage, contouring the land and reseeding, and data information systems. A total of 24 buildings would be constructed, with improved roads, sidewalks, and an underground tunnel system.

MITIGATION: As a result of preapplication coordination the applicant has proposed the following mitigation efforts to reduce impacts to the aquatic environment:

During Construction

- Conduct vegetation clearing operations in a manner that does not disturb the organic mat or ground surface.
- Limit grubbing operations (mechanized land clearing) to just the filled or excavated areas.
- Conduct thinning operations by hand in order to prevent wetland impacts.
- Do not conduct clearing, grubbing or thinning from 1 May through 15 July.
- Construct the fuel break in a way that utilizes existing natural and man-made barriers in order to minimize the amount of new clearing required.

During Range Operation

- Use the Range and Training Land Assessment (RTLA) program and the Land Rehabilitation and Maintenance (LRAM) program to inventory land conditions, monitor vegetation trends, repair damaged areas, and minimize future damage during operations.
- Continue use of the environmental limitations overlays for planning military training activities within the range complex and minimizing wetland damage.

ADDITIONAL WORK NOT REQUIRING A DEPARTMENT OF THE ARMY PERMIT:

- Access to the site will be east and south from the Richardson Highway via 33 Mile Loop Road, an all-season gravel road. Upgrades are not explicitly called for in the range design documents; however, the contractor may choose to improve the road within its existing footprint.

- Electrical power distribution will be provided to the site by approximately 156 power poles (overhead 3-phase primary) and some underground lines (direct buried 3-phase primary). The poles and underground portions will be located on the same side (to the south or west) of 33 Mile Loop Road for the entire distance. No part of the power distribution route will cross wetlands. Three power poles will be placed within the riparian zone of Jarvis Creek. Minimal tree trimming and disturbance for placing the poles will occur.

- Some of the small targets will not have permanent service roads. Clearing will be conducted on the shortest line from the main road to the target in order to access the site for initial construction. Grubbing will not be done for these access trails.

- The material site (gravel pit) is located in uplands between Buffalo Drop Zone and the CACTF construction site, along 33-ML Rd. (Sheet 5 of 27).

- There will be a contractor office site and laydown yard, which will be located in uplands between the CACTF and BAX (Sheet 5 of 27).

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are no listed or eligible properties in the vicinity of the worksite. Consultation of the AHRS constitutes the extent of cultural resource investigations by the District Engineer at this time, and he is otherwise unaware of the presence of such resources. This application is being coordinated with the State Historic Preservation Office (SHPO). Any comments SHPO may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between the Federal government and Federally recognized Tribes. This notice invites participation by agencies, Tribes, and members of the public in the Federal decision-making process. In addition, Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This Public Notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Engineer during the public comment period.

ENDANGERED SPECIES: No threatened or endangered species are known to use the project area. Preliminarily, the described activity will not affect threatened or endangered species, or their critical habitat designated as endangered or threatened, under the Endangered Species Act of 1973 (87 Stat. 844). This application is being coordinated with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. Any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The proposed work is being evaluated for possible effects to Essential Fish Habitat (EFH) pursuant to the Magnuson Stevens Fishery Conservation and Management Act of 1996 (MSFCMA), 16 U.S.C. et seq and associated federal regulations found at 50 CFR 600 Subpart K. The Alaska District includes areas of EFH as Fishery Management Plans. We have reviewed the January 20, 1999, North Pacific Fishery Management Council's Environmental Assessment to locate EFH areas as identified by the National Marine Fisheries Service (NMFS). We have determined that the described activity within the proposed area will not adversely affect EFH, including anadromous fish and federally managed fishery resources.

SPECIAL AREA DESIGNATION: None

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general balancing process. That decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns,

wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above.

The Corps Public Notice represents the applicant's preferred alternative for development of the Combat Training Facility. The Public Notice is being released concurrently with the Supplemental Draft Environmental Impact Statement (SDEIS) for the project. Your comments will be used in the preparation of Record of Decision for the Environmental Impact Statement pursuant to the National Environmental Policy Act. Further information regarding the SDEIS is available at the following website: http://www.usarak.army.mil/conservation, or by contacting Ms. Carrie McEnteer (907) 353-9507 (in Fairbanks), Ms. Ellen Clark (907) 873-1614 (in Delta Junction) or Major Kirk Gohlke (907) 384-1542 (in Anchorage).

Comments on the described work, with the reference number, should reach this office no later than the expiration date of this Public Notice to become part of the record and be considered in the decision. Please contact Ms. Christy Everett at (907) 474-2166, or email at christy.a.everett@poa02.usace.army.mil if further information is desired concerning this notice.

AUTHORITY: This permit will be issued or denied under the following authority:

Discharge dredged or fill material into waters of the United States - Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

A plan and Notice of Application for State Water Quality Certification are attached to this Public Notice.

District Engineer
U.S. Army, Corps of Engineers

Attachments

FRANK H. MURKOWSKI, GOVERNOR

STATE OF ALASKA

OFFICE OF THE GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER
Non-Point Source Water Pollution Control Program
401 Certification Program

NOTICE OF APPLICATION FOR STATE WATER QUALITY CERTIFICATION

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice No. **POA-2005-614-4, Jarvis Creek** serves as application for a short-term variance of State Water Quality Certification from the Department of Environmental Conservation, as provided in Section 401 of the Clean Water Act of 1977 (PL 95-217).

The Department will review the proposed activity to ensure that, except for an allowed, short-term variance, any discharge to waters of the United States resulting from the referenced project will comply with the Clean Water Act of 1977 (PL95-217), the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

Any person desiring to comment on the project with respect to Water Quality Certification may submit written comments within 30 days of the date of the Corps of Engineer's Public Notice to:

Department of Environmental Conservation
WQM/401 Certification
555 Cordova Street
Anchorage, Alaska 99501-2617
Telephone: (907) 269-7564
FAX: (907) 269-7508

Attachment 1

TABLES

Table 1. Summary of Project Impacts by Component

Combat Training Facility Component	Total Construction Footprint (Acres)	Total Fill (CY)	Wetland Acres Filled and/or Mechanically Cleared	Fill in Wetlands (CY)
BAX	500*	420,000	24	166,505
CACTF	79	88,000	2	3,090
Power Pole Installation	<1	118	0**	0**
Total	579	508,118	26	169,595

* includes the fuel break.
**3 poles will be placed in a riparian zone near Jarvis Creek. For installation of these 3 poles, <0.001 acre will be impacted by the auger itself, while a slightly larger area (up to 0.001 acres) may be disturbed by the construction vehicle.

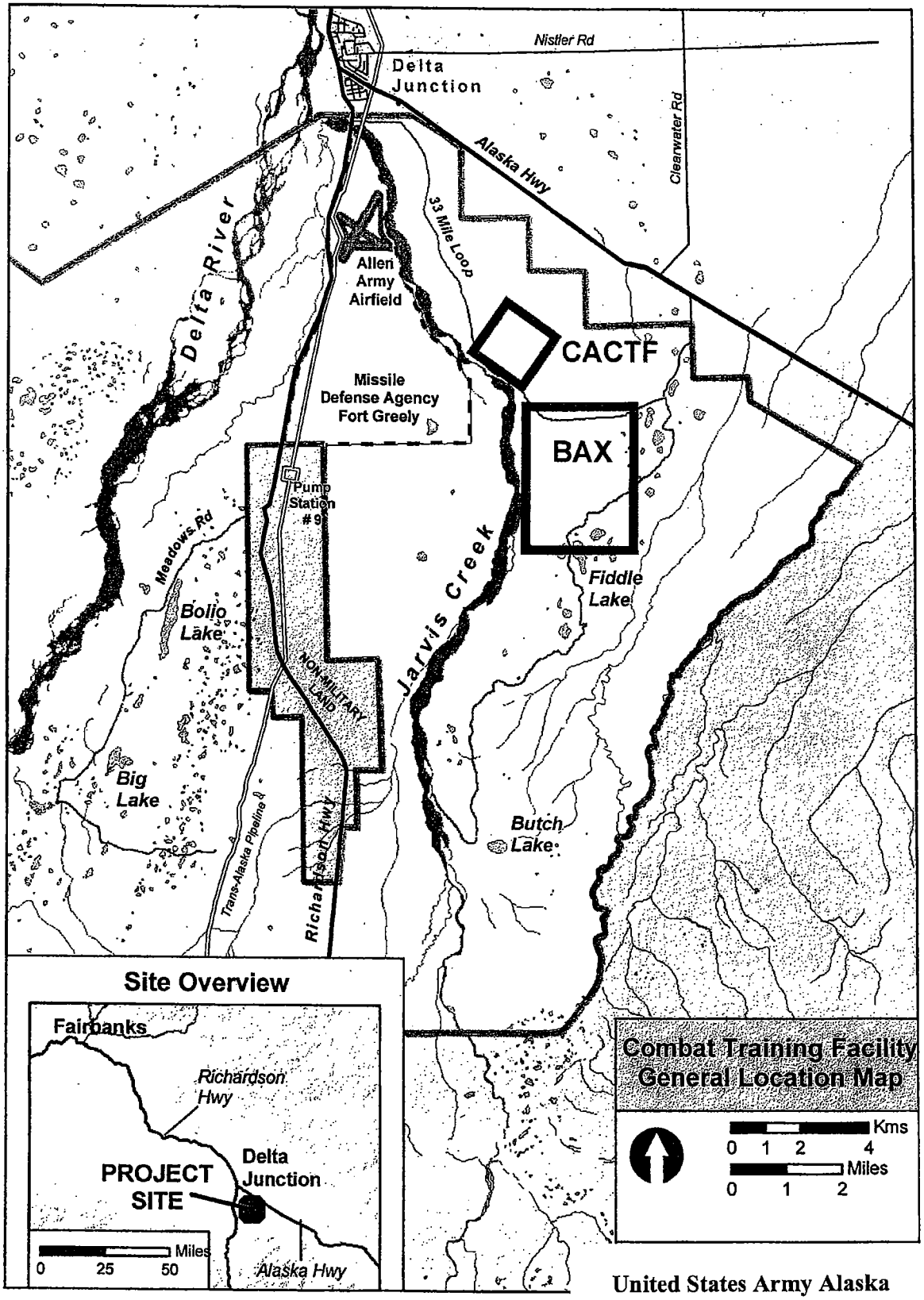
Table 2. Impacts of Construction Categories by Type.

Construction Activity	Total Construction Footprint (Acres)	Total Fill (CY)	Wetland Acres Mechanically Cleared, no ground disturbance	Wetland Acres Filled and/or Mechanically Cleared and Grubbed	Fill in Wetlands (CY)
Roads	53	241,000	0	17	110,263
Target Arrays	48	153,000	0	2	34,864
Building Pads	5	114,000	0	0	0
Utilities within the Ranges	*	*	0	2	24,468
Power Pole Installation	<1	118	0	0	0
Clearing	551**	0	77	0	0
Fuel Break	28 acres hydroaxed*** + 3 acres thinned	0	0	5	Incidental disruption of ground surface
Total	579	508,118	77	26	169,959

*Disturbance for utilities is included in the construction footprints of roads and other improvements.
**Clearing areas include Roads, Target Arrays, Building Pads, and Utilities.
***Masticating head hydroaxe will be used.

ABBREVIATIONS

BES	Battle Effects Simulator
CMP	Corrugated Metal Pipe (Culvert)
FC	Flir Camera
FP	Firing Position
MAT	Moving Armor Target
MIT	Moving Infantry Target
MGB	Machine Gun Bunker
PC	Down Range Power Center
PTSR	Primary Target Service Road
ROCA	Range Operations and Control Area
SAT	Stationary Armor Target
SIT	Stationary Infantry Target
STSR	Secondary Target Service Road
TR	Trench



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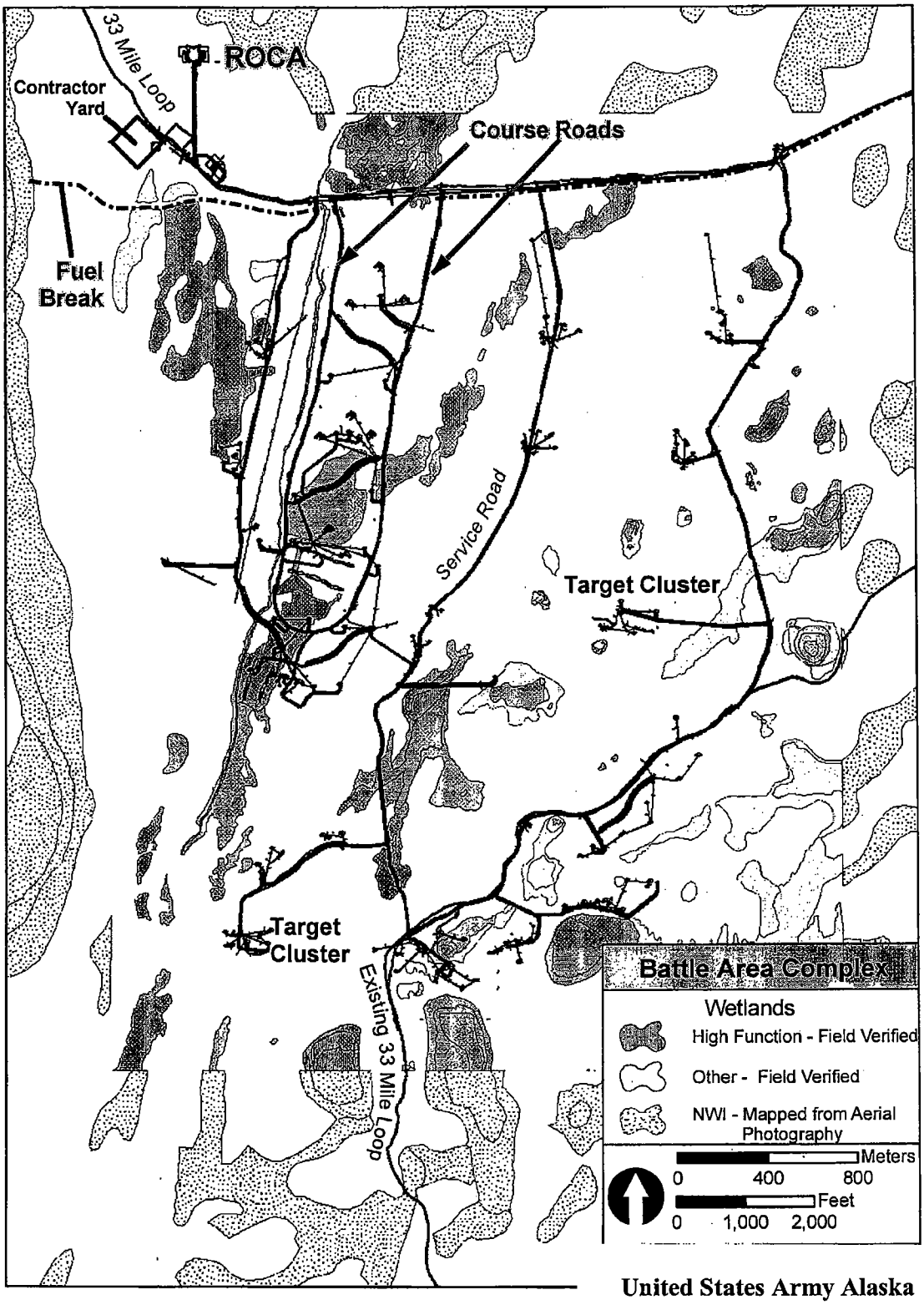

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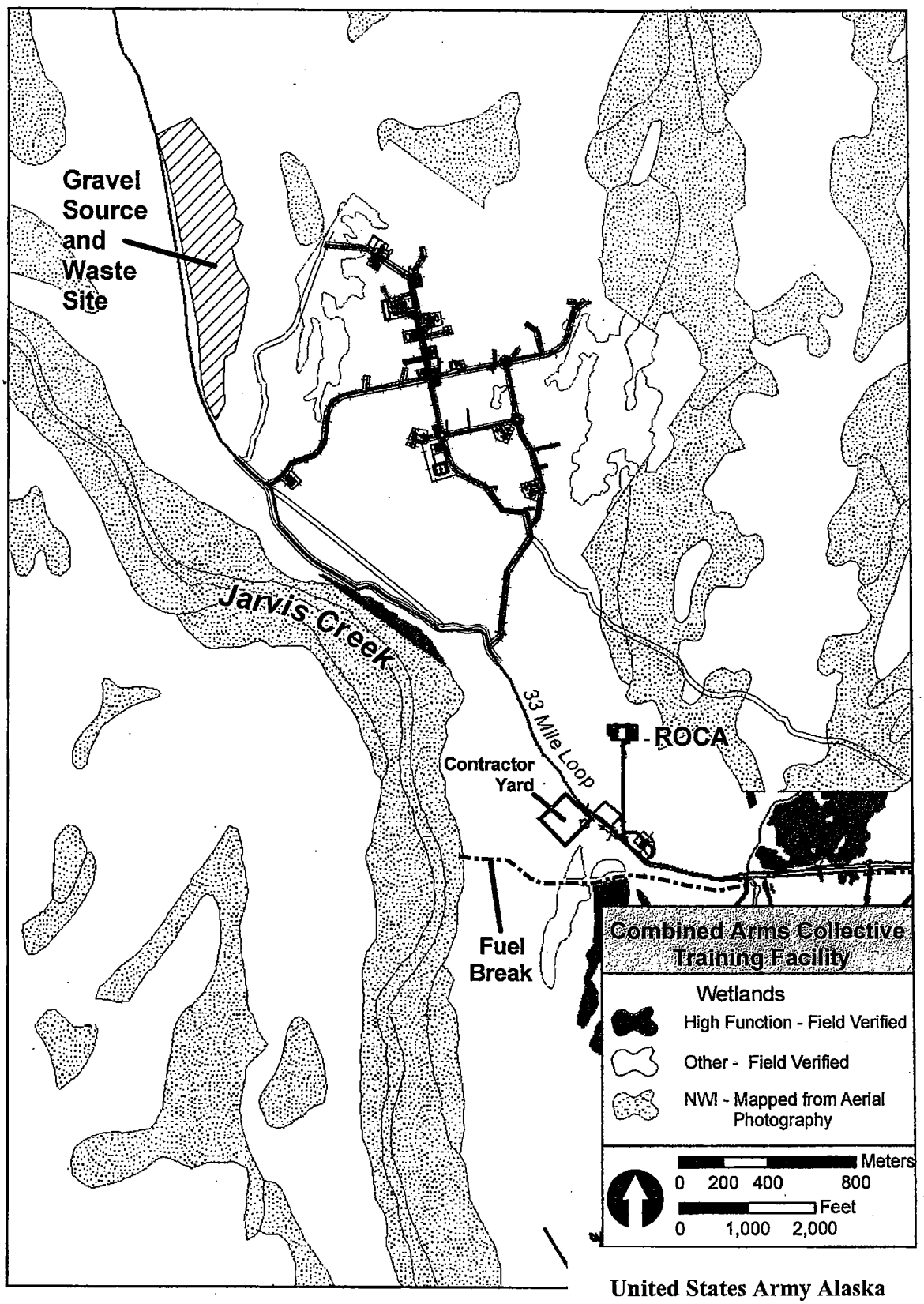

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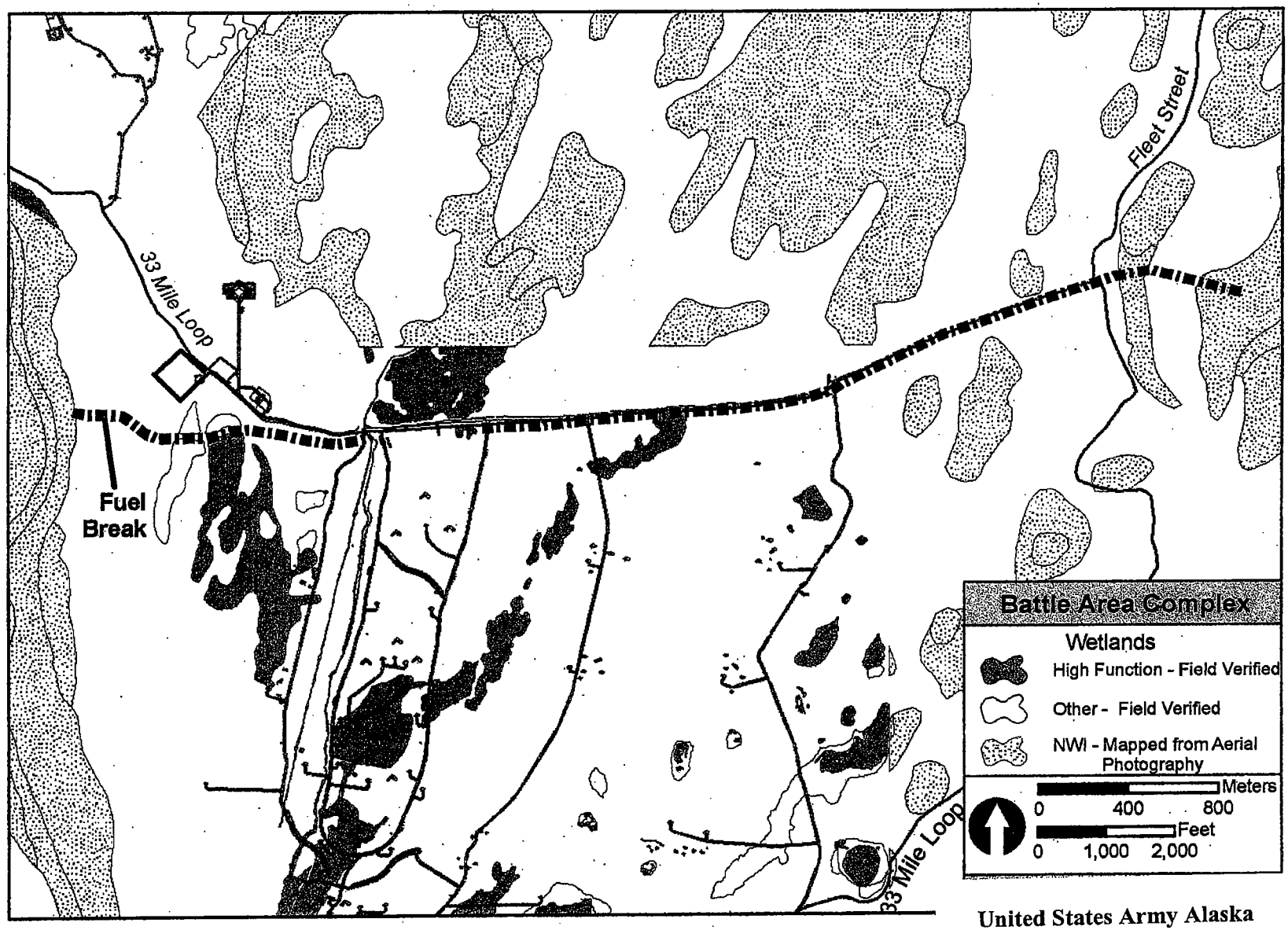

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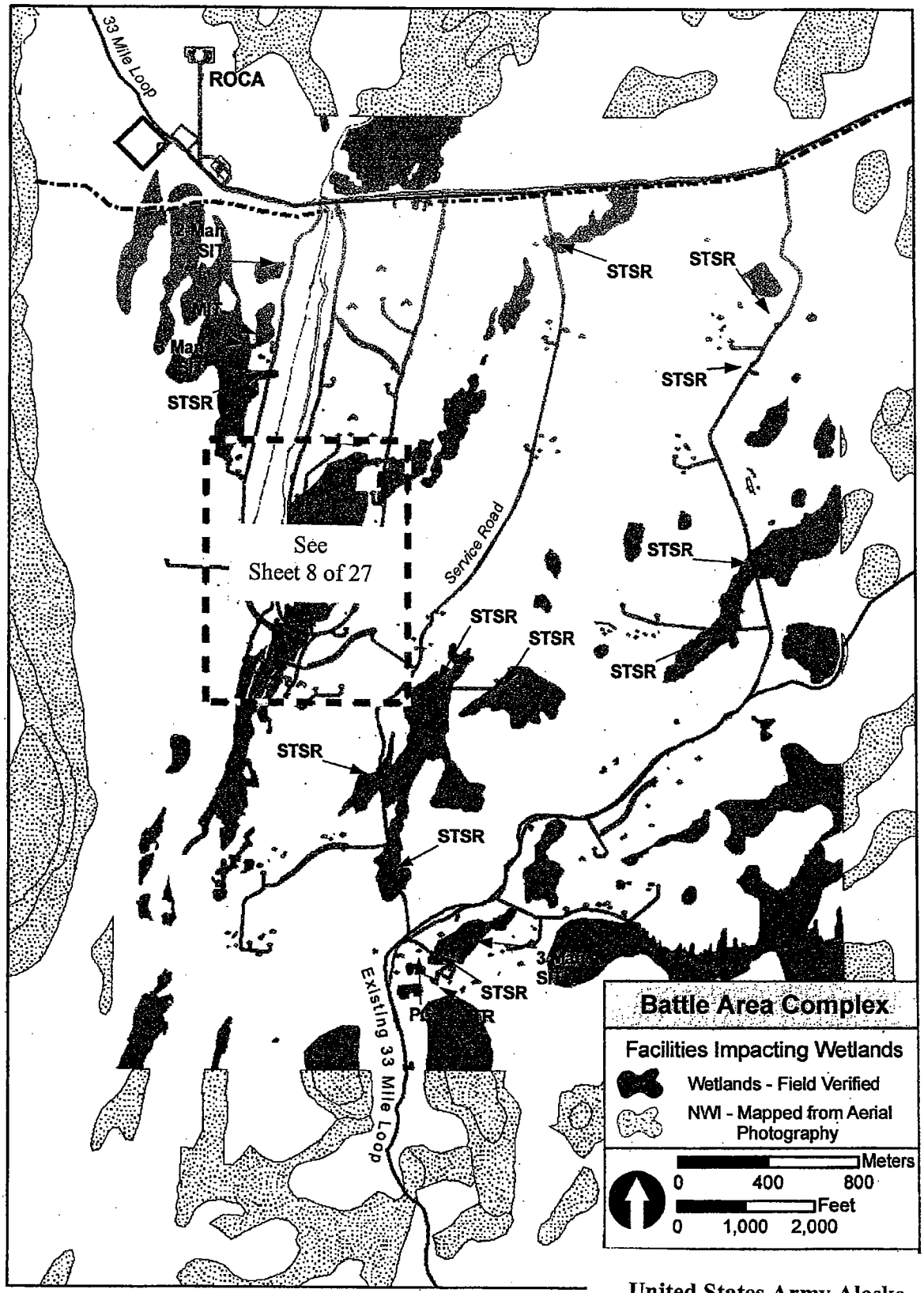

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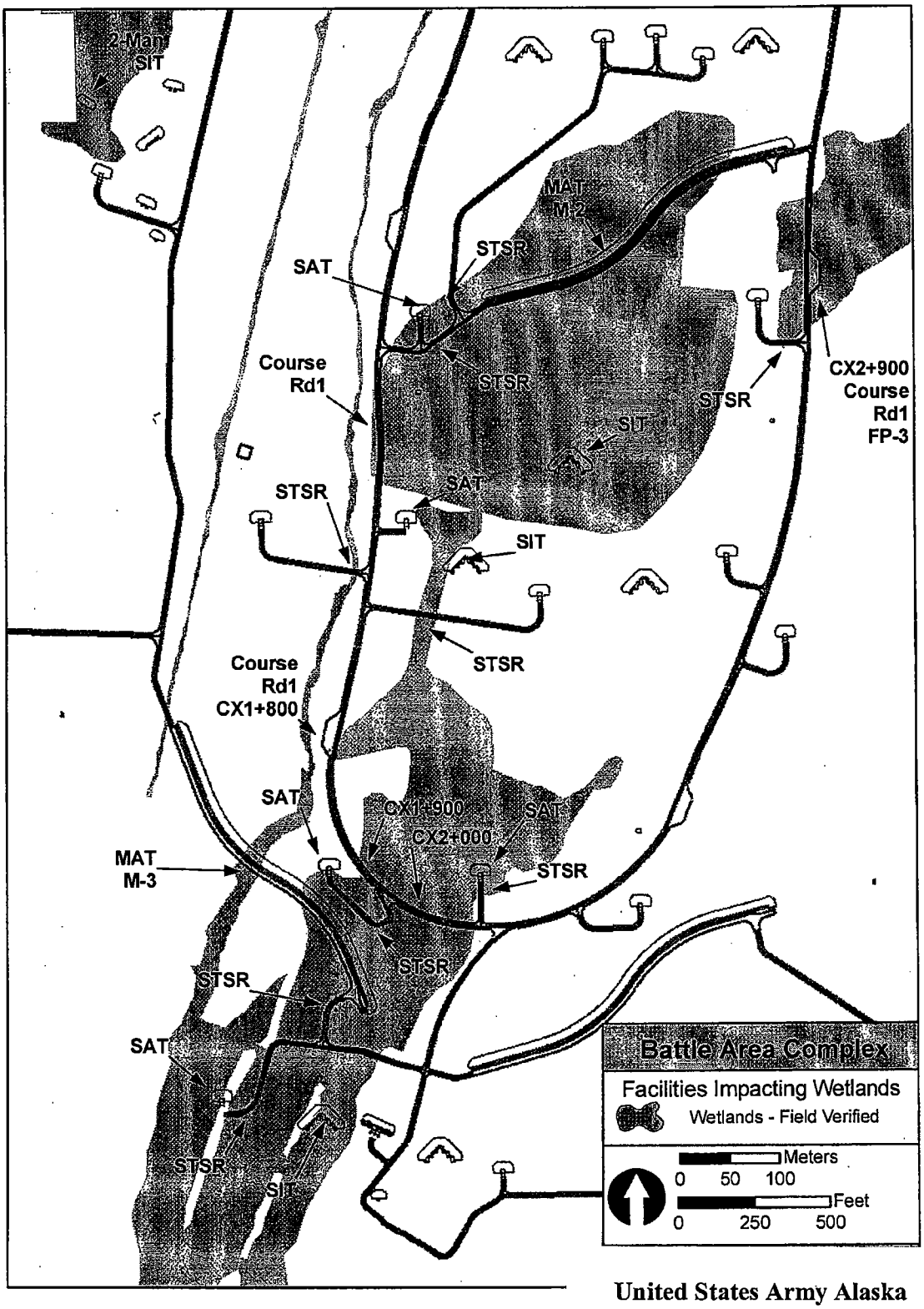

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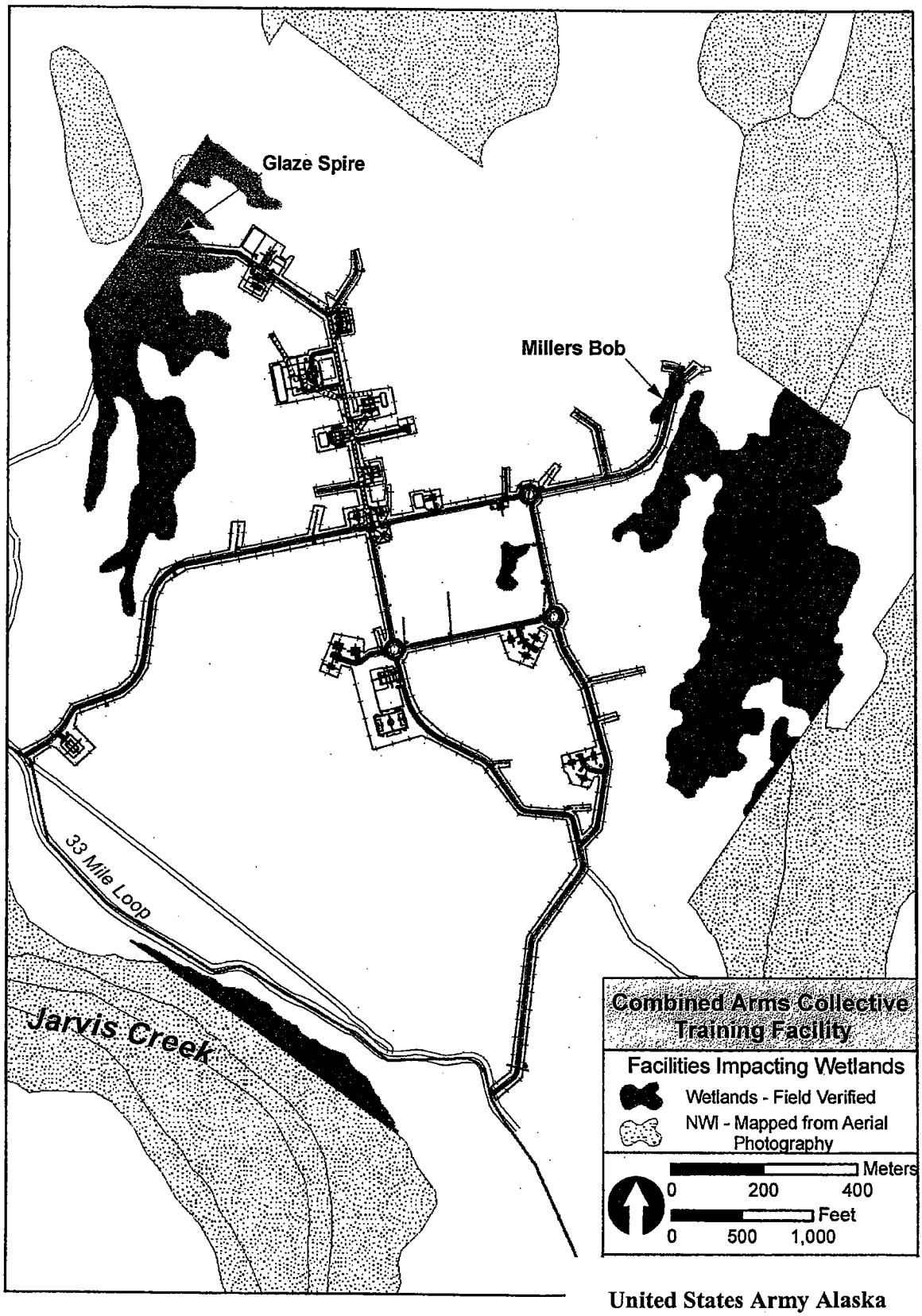

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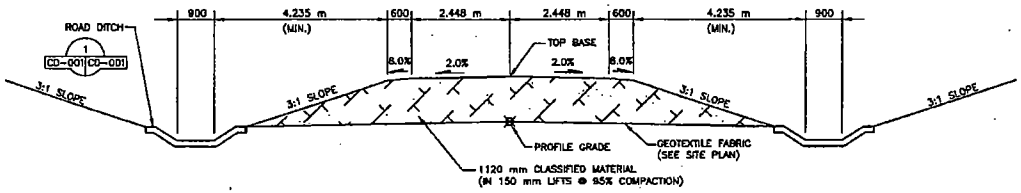
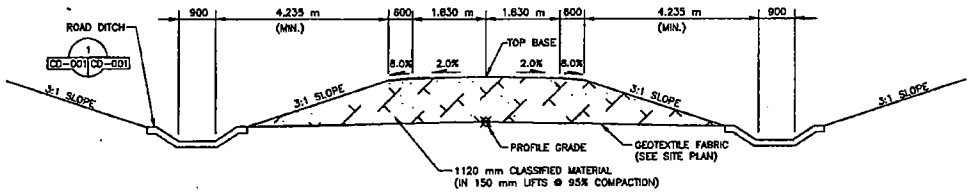


COURSE ROADS

SCALE: 1: 50



PRIMARY AND SECONDARY TARGET SERVICE ROADS

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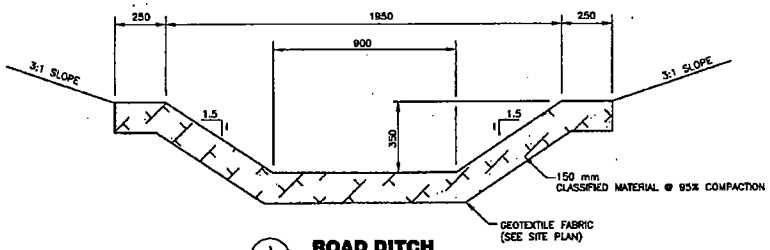
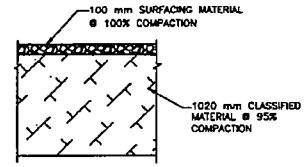


1 CD-001 CD-001 CD-001A **ROAD DITCH**

SCALE: 1: 10

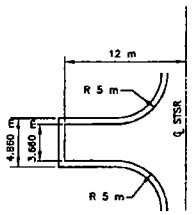
NOTES:

1. FINAL LOCATION OF SECONDARY TARGET SERVICE ROADS (STSRs) WILL BE MADE IN THE FIELD. GENERAL LOCATIONS OF STSRs AND STSR TURNAROUNDS ARE SHOWN ON GENERAL SITE PLAN SHEETS C-003 THRU C-025. STSRs WILL GENERALLY FOLLOW NATURAL TERRAIN.
2. DITCHES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL THE END OF CONSTRUCTION AND/OR A FULL STAND OF GRASS/GROUND COVER IS PRESENT.
3. THE CONTRACTOR SHALL USE CLASSIFIED MATERIAL AS REQUIRED TO BUILD UP TO PROFILE GRADE IN FILL SECTIONS.
4. ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.



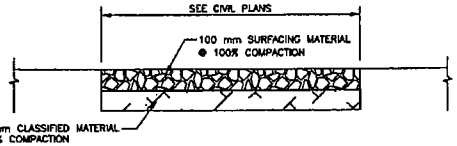
TYPICAL GRAVEL PARKING AND SHOOTHOUSE PAD DETAIL

SCALE: 1: 20



STSR TURNAROUNDS

SCALE: 1: 200



PEDESTRIAN RATED SURFACE

(SUPPORT FACILITIES AND SIDEWALKS)

SCALE: 1: 10

GRAPHIC SCALES

200 100 0 100 200
SCALE: 1: 10

1000 500 0 500 1000
SCALE: 1: 50

400 200 0 200 400
SCALE: 1: 20

5000 0 5000
SCALE: 1: 200

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

TYPICAL ROAD AND TRAIL SECTIONS

Reference number:

CD-001

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FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

CROSS SECTION
COURSE ROAD No. 1

Reference number: CX-006
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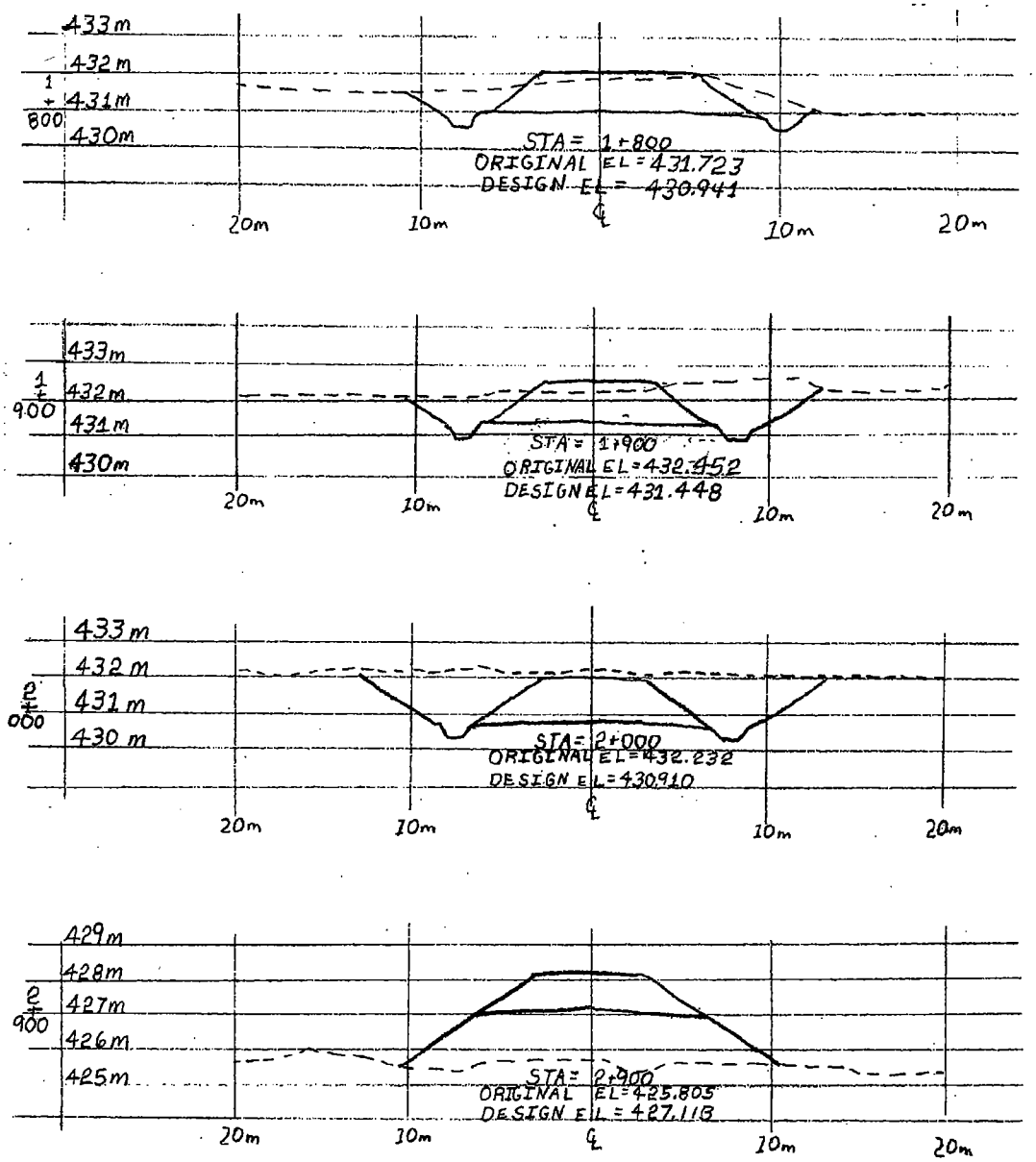

COURSE ROAD No. 1

LEGEND

EXISTING GRADE

ROAD TEMPLATE

GRAPHIC SCALE

0 2 4 6 8 10

SCALE: 1: 200 HORIZ.

2 1 0 1 2

SCALE: 1: 100 VERT.

All Measurement Are In Meters
Unless Otherwise Noted

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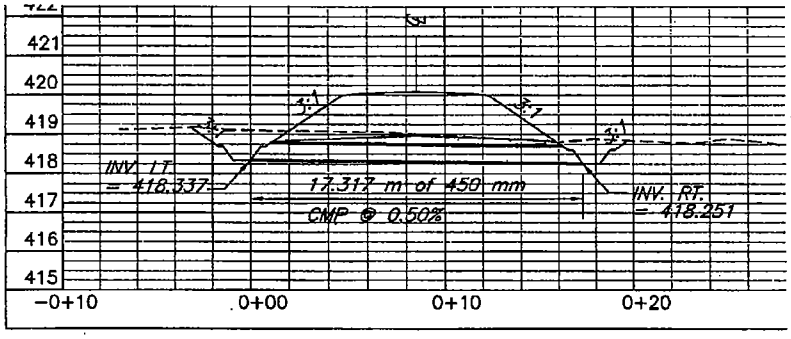
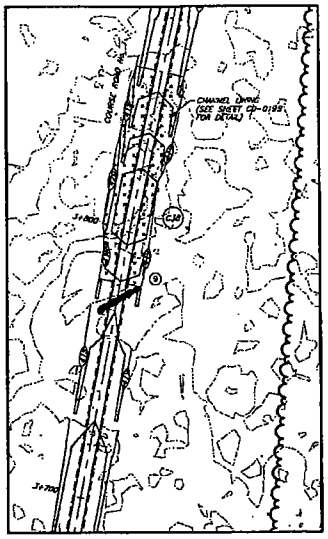
US ARMY CORPS OF ENGINEERS ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

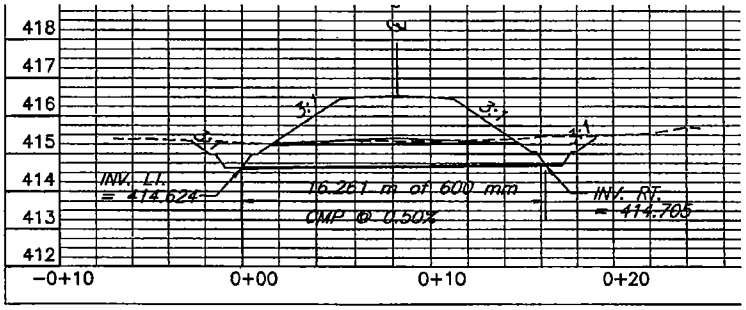
CULVERT PROFILES

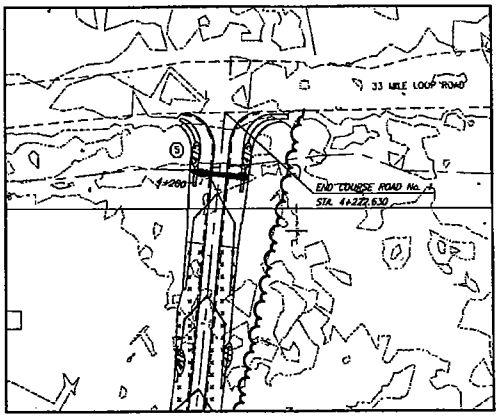
Reference number: C-155 Sheet 184 of



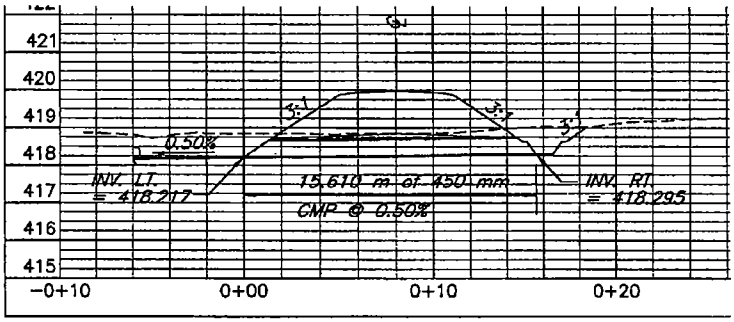


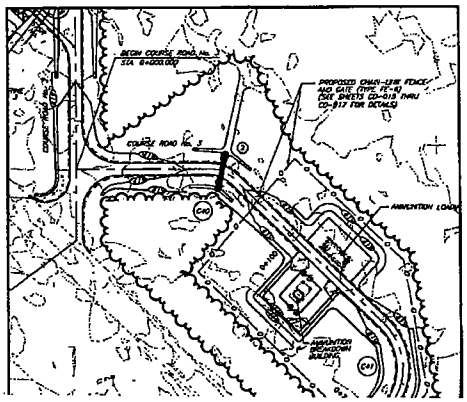
18" Diameter **CULVERT No. 9 - COURSE ROAD No. 1**





24" Diameter **CULVERT No. 5 - COURSE ROAD No. 1**





18" Diameter **CULVERT No. 2 - COURSE ROAD No. 3**

LEGEND

EXISTING GRADE

NEW ROAD

NEW CULVERT

All Measurement Are In Meters
Unless Otherwise Noted

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FT. WAINWRIGHT, ALASKA (DTA)
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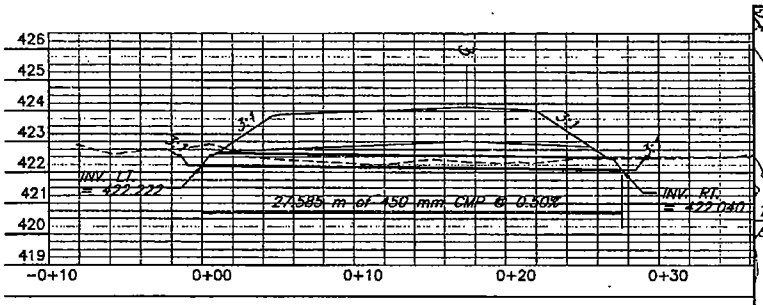
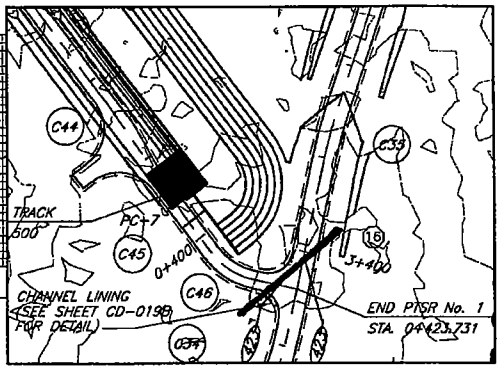
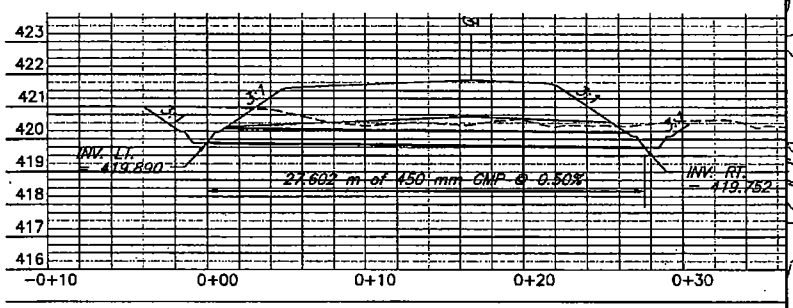
CULVERT PROFILES

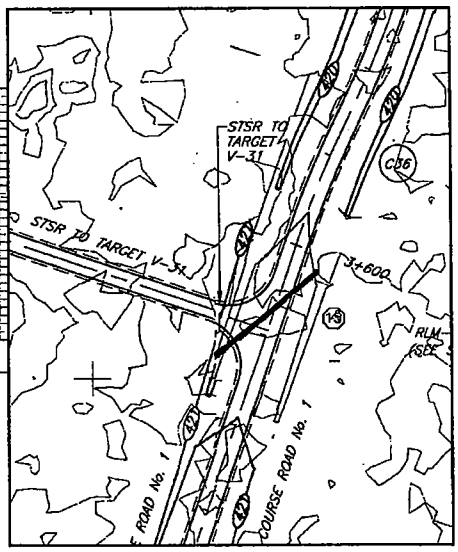
Reference number: C-155 Sheet 184 of



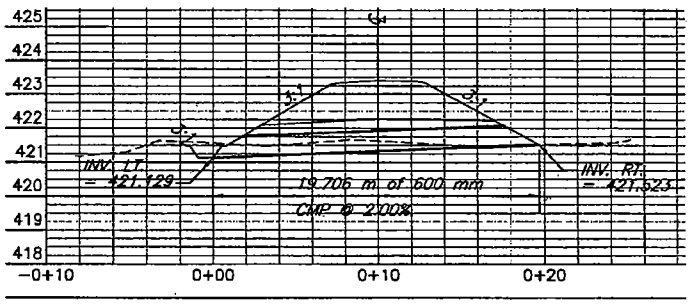


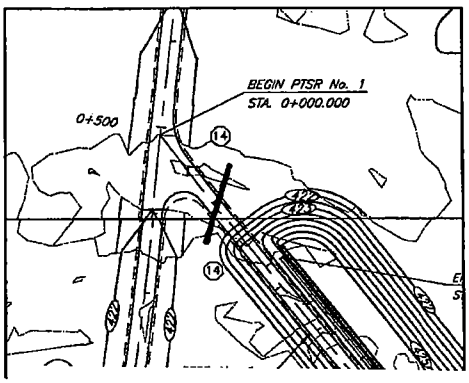
18" Diameter **CULVERT No. 16 - COURSE ROAD No. 1**





18" Diameter **CULVERT No. 15 - COURSE ROAD No. 1**





24" Diameter **CULVERT No. 14 - PTSR No. 1**

LEGEND

------- EXISTING GRADE

NEW ROAD

NEW CULVERT

All Measurement Are In Meters
Unless Otherwise Noted

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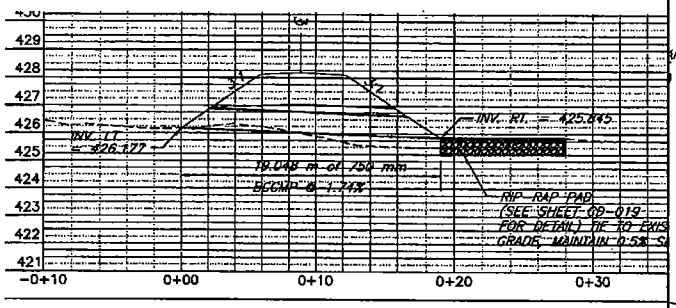
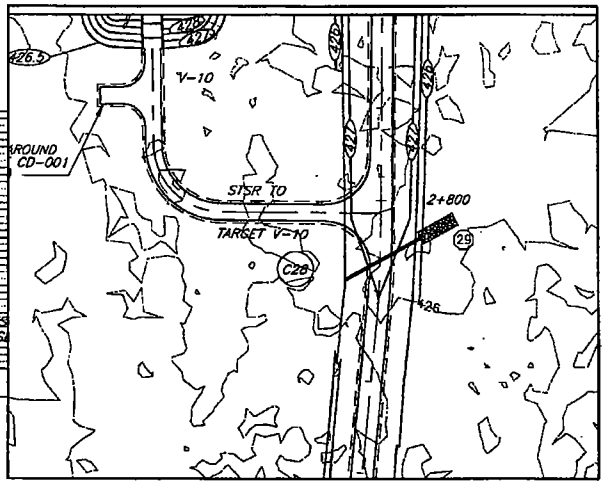
US ARMY CORPS OF ENGINEERS ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

CULVERT PROFILES

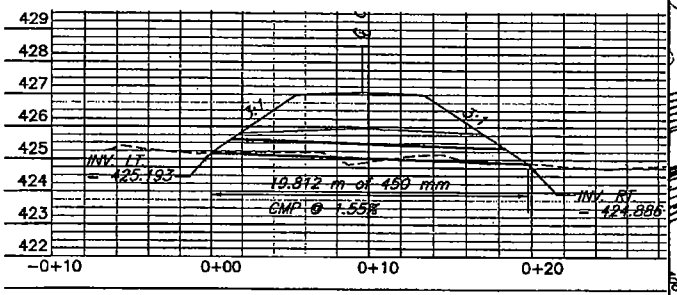
Reference number: C-156 Sheet 185 of

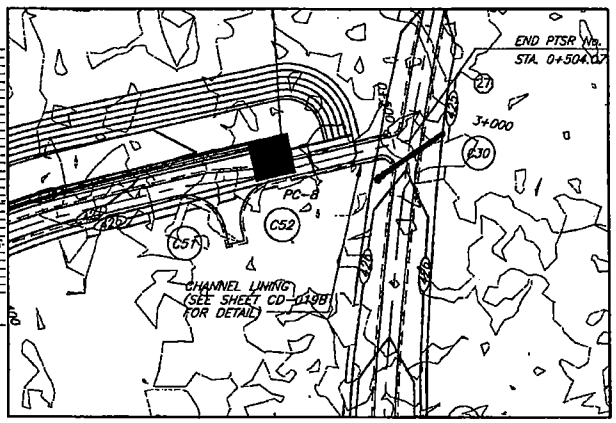




CULVERT No. 29 - COURSE ROAD No. 1

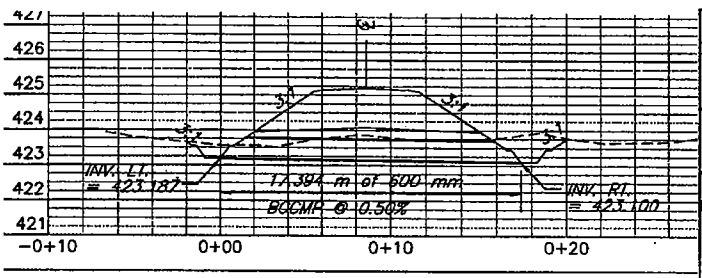
30" Diameter

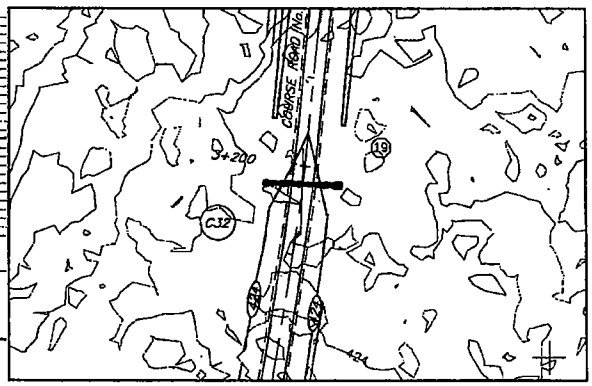




CULVERT No. 27 - COURSE ROAD No. 1

18" Diameter





CULVERT No. 19 - COURSE ROAD No. 1

24" Diameter

LEGEND

------ EXISTING GRADE

NEW ROAD

NEW CULVERT

All Measurement Are In Meters
Unless Otherwise Noted

United States Army Alaska
POA-2005-164-4
March 2006
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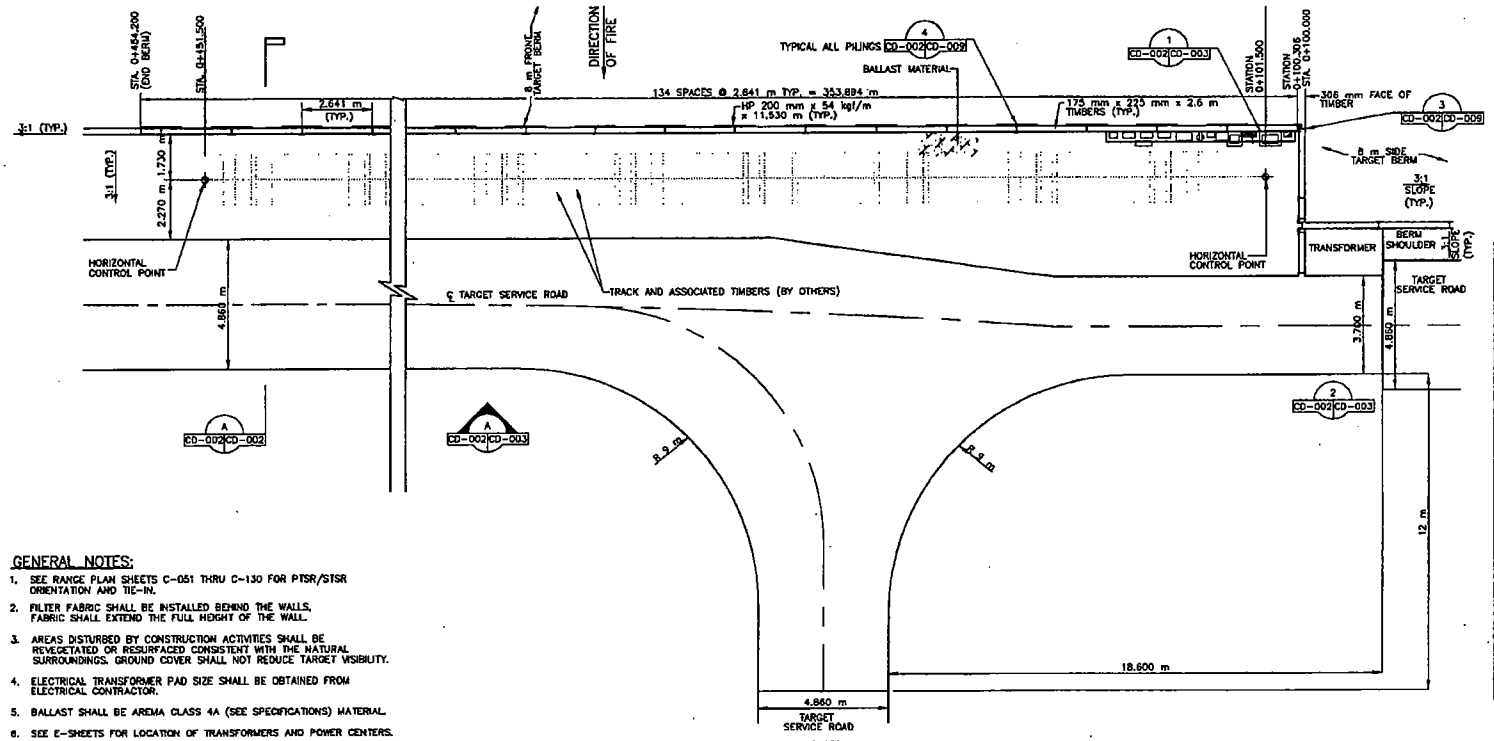
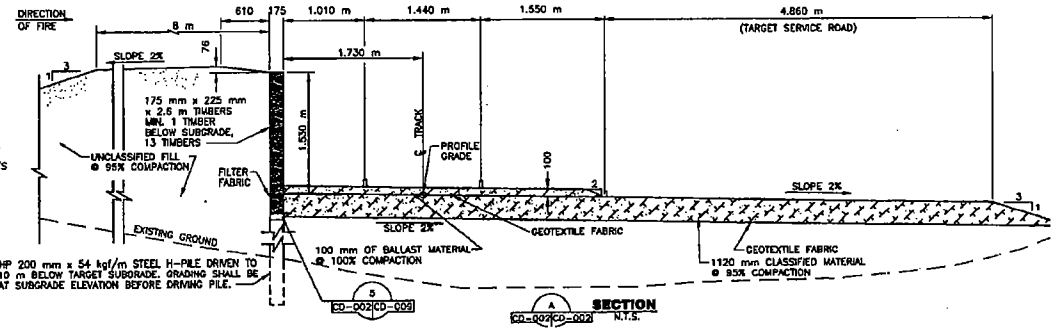


PLAN

TYPICAL MOVING ARMOR TARGET SYSTEM

SCALE: 1: 75



GENERAL NOTES:

1. SEE RANGE PLAN SHEETS C-051 THRU C-130 FOR PTSR/STSR ORIENTATION AND TIE-IN.
2. FILTER FABRIC SHALL BE INSTALLED BEHIND THE WALLS. FABRIC SHALL EXTEND THE FULL HEIGHT OF THE WALL.
3. AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED OR RESURFACED CONSISTENT WITH THE NATURAL SURROUNDINGS. GROUND COVER SHALL NOT REDUCE TARGET VISIBILITY.
4. ELECTRICAL TRANSFORMER PAD SIZE SHALL BE OBTAINED FROM ELECTRICAL CONTRACTOR.
5. BALLAST SHALL BE AREMA CLASS 4A (SEE SPECIFICATIONS) MATERIAL.
6. SEE E-SHEETS FOR LOCATION OF TRANSFORMERS AND POWER CENTERS.
7. SEE GENERAL SITE PLAN SHEETS C-003 THRU C-025 FOR TARGET LAYOUT.
8. STATION 0+100.000 IS ALWAYS LOCATED ON THE TRANSFORMER END OF THE MAT.
9. SEE SHEETS C-133 AND C-134 FOR HORIZONTAL AND VERTICAL CONTROL POINT DATA.
10. SEE SHEETS C-143 THRU C-148 FOR MAT PLAN AND PROFILES.
11. SLOPE WALL AT A 3:1 SLOPE TO A POINT 300 mm ABOVE THE EXISTING GRADE.
12. TRANSFORMER MAY BE MIRRORED AND LOCATED AT OPPOSITE END OF MAT EMPLACEMENT, SEE ELECTRICAL SHEETS.
13. CONTRACTOR SHALL PROVIDE 500 cu m OF BALLAST AT EACH MAT. CONTRACTOR SHALL PLACE 100 mm THICKNESS AS SHOWN IN SECTION A AND STOCKPILE THE REMAINDER OF THE BALLAST AT EACH END OF THE MAT.
14. BALLAST SHALL NOT BE DELIVERED BEFORE OBTAINING CONTRACTING OFFICER'S PERMISSION.
15. ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

GRAPHIC SCALE

2000 0 2000

SCALE: 1: 75

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRUCE A. BRADLEY ON 20 JAN 2004

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

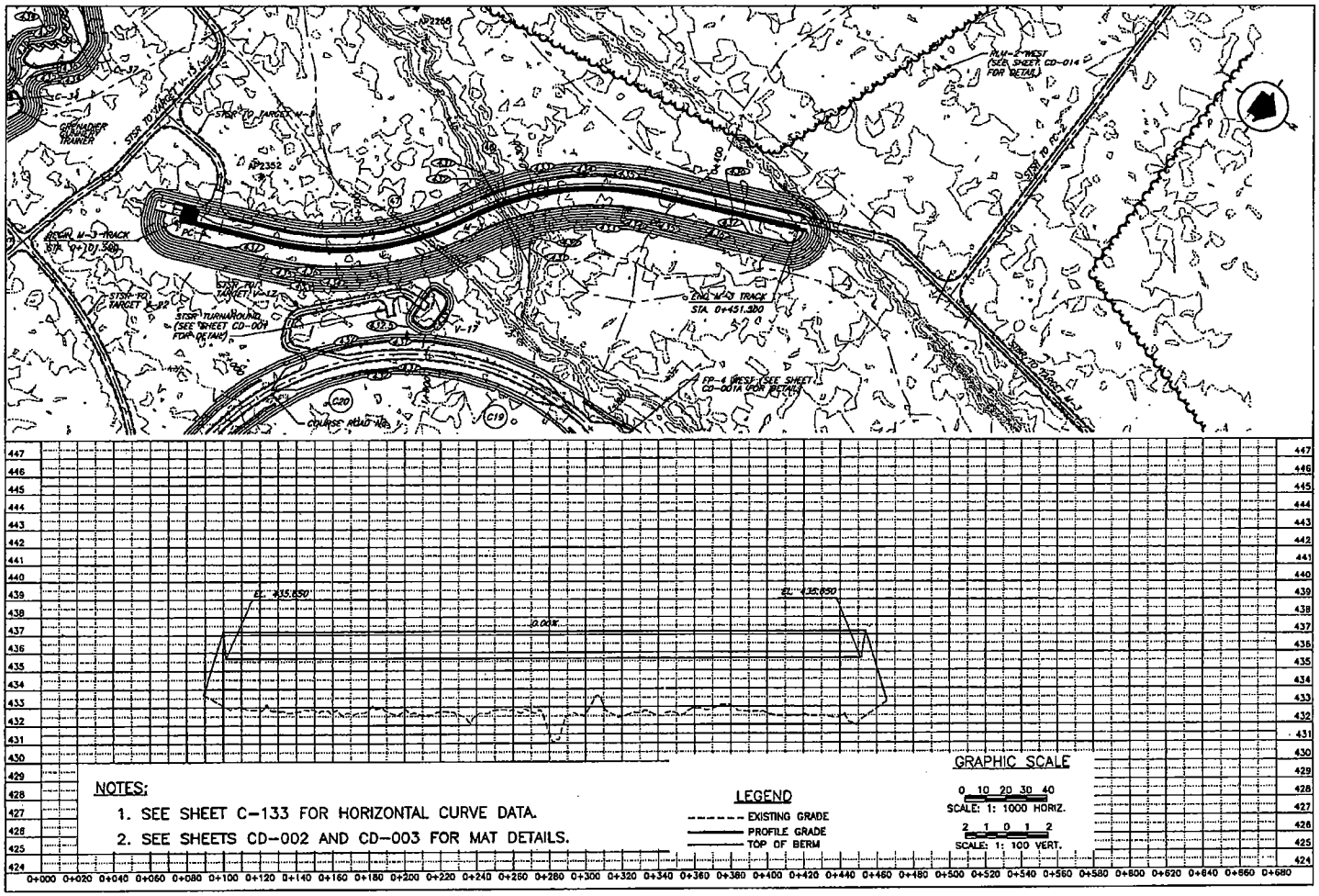
FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

MOVING ARMOR TARGET (MAT) EMPLACEMENT

Reference number:

CD-002

Sheet 236 of



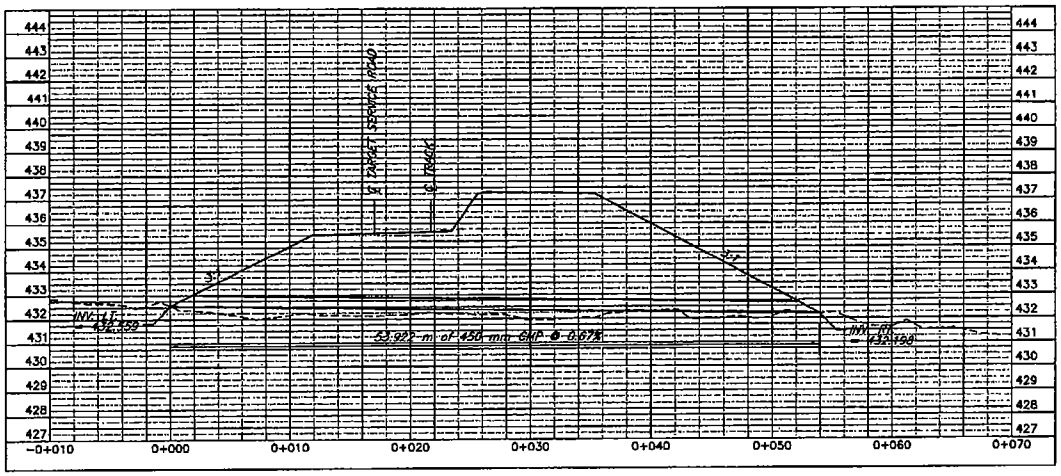
US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

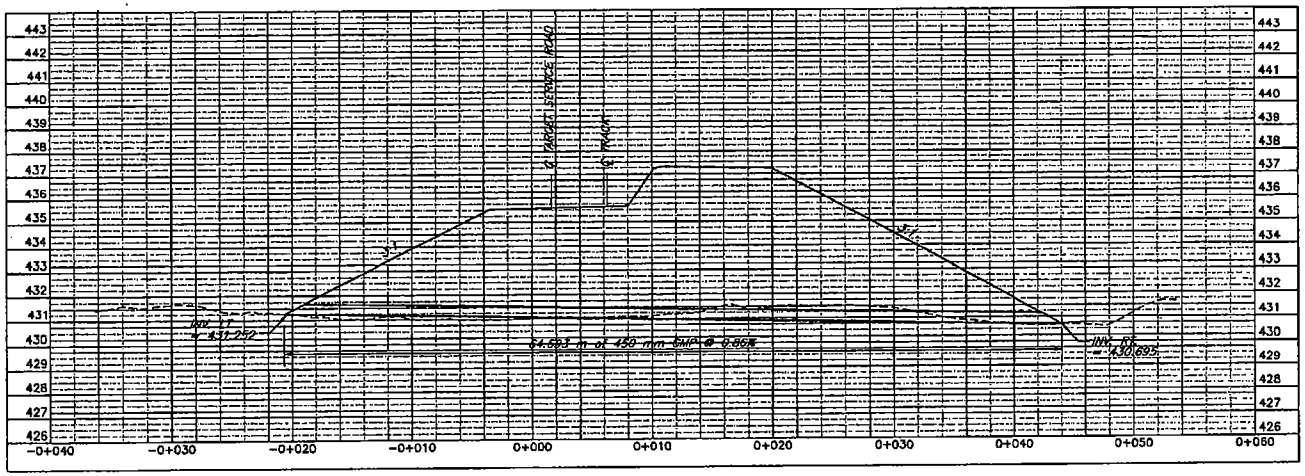
PLAN AND PROFILE
MOVING ARMOR TARGET (MAT)
M-3

Reference number:
C-145
Sheet 175 of

All Measurement Are In Meters
Unless Otherwise Noted



CULVERT No. 47 - THROUGH TARGET M-3



CULVERT No. 46 - THROUGH TARGET M-3

LEGEND

EXISTING GRADE

NEW ROAD

NEW CULVERT

All Measurement Are In Meters
Unless Otherwise Noted

US ARMY CORPS
OF ENGINEERS
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

CULVERT PROFILES

Reference number:

C-157

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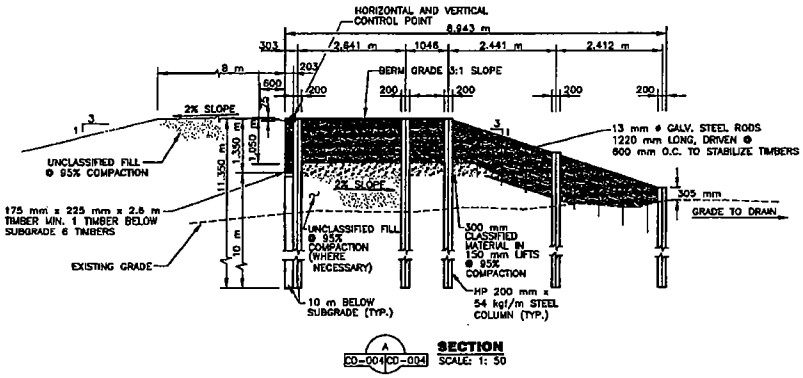
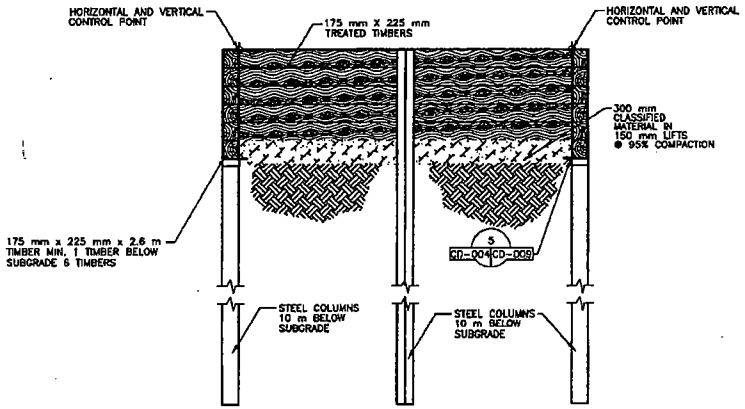
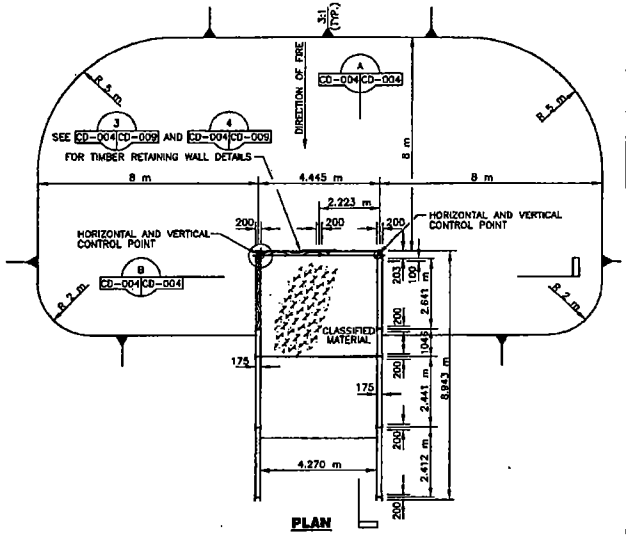


A CD-004|CD-004 **SECTION** SCALE: 1: 50



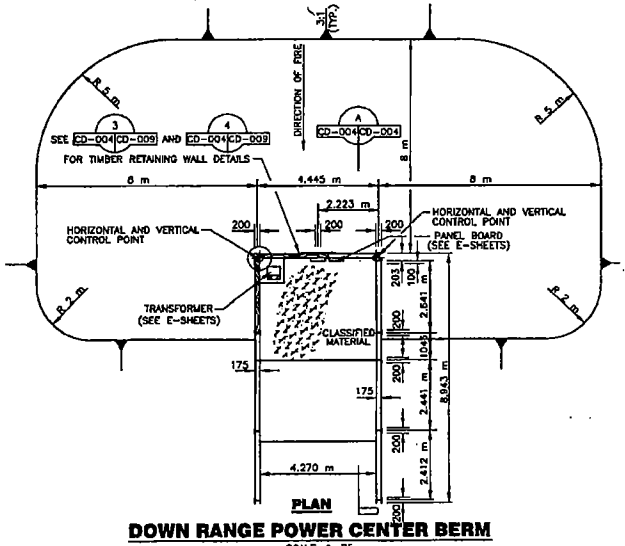
B CD-004|CD-004 **SECTION** SCALE: 1: 25



PLAN

STATIONARY ARMOR TARGET

SCALE: 1: 75



PLAN

DOWN RANGE POWER CENTER BERM

SCALE: 1: 75

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

STATIONARY ARMOR TARGET (SAT) AND DOWN RANGE POWER CENTER-EMPLACEMENT

Reference number:

CD-004

Sheet 238 of

GENERAL NOTES:

1. ENCLOSE TOP OF EMPLACEMENT WITH WOOD FRAMED BOX SIMILAR TO STATIONARY INFANTRY TARGET, SEE DETAIL SHEET CD-007A.
2. SEE GENERAL SITE PLAN SHEETS C-003 THRU C-025 FOR TARGET LAYOUT.
3. SEE SHEETS C-132 AND C-134 FOR HORIZONTAL AND VERTICAL CONTROL POINT DATA.
4. ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

GRAPHIC SCALES

500 0 500
SCALE: 1: 25

1000 500 0 500 1000
SCALE: 1: 50

2000 0 2000
SCALE: 1: 75

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRUCE A. BRADLEY ON 20 JAN 2004

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March 2006
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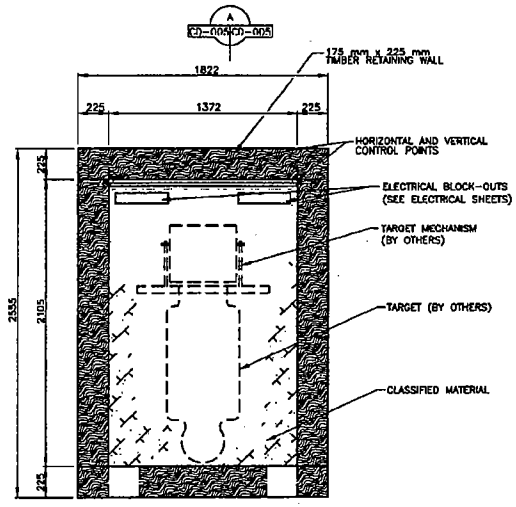
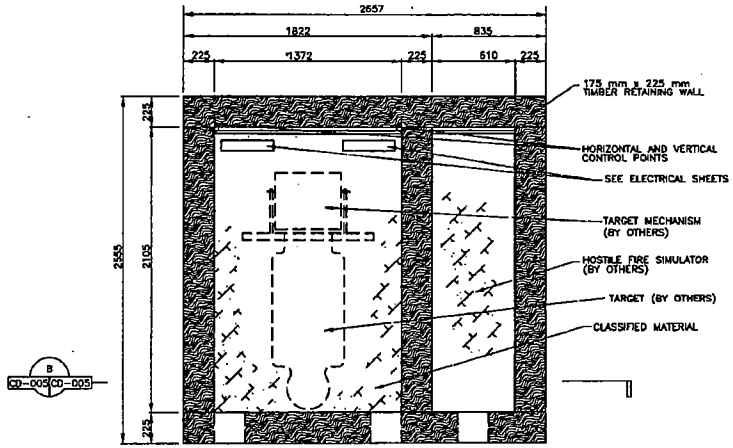


STATIONARY INFANTRY TARGET
SCALE: 1: 15



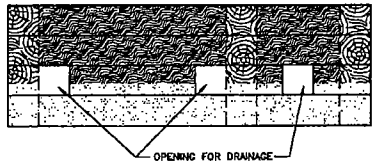
STATIONARY INFANTRY TARGET w/ HOSTILE FIRE SIMULATOR
SCALE: 1: 15

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

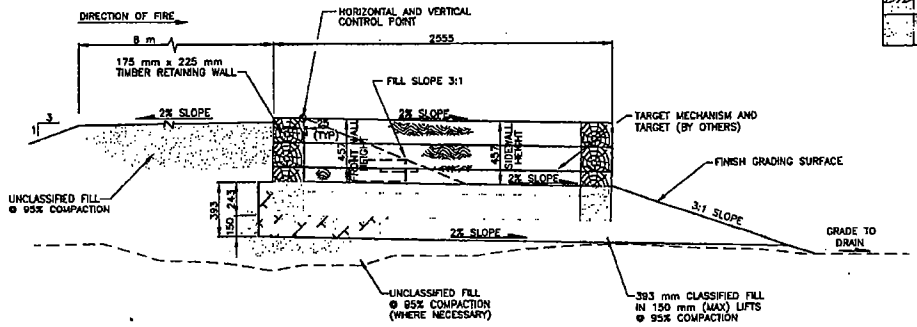
FT. WAINWRIGHT, ALASKA (OTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

STATIONARY INFANTRY TARGET (SIT)
EMPLACEMENT AND SECTION
AND HOSTILE FIRE SIMULATOR

Reference number:
CD-005
Sheet 239 of



B
CD-005/CD-005 **SECTION**
SCALE: 1: 15



A
CD-005/CD-005 **SECTION**

STATIONARY INFANTRY TARGET
SCALE: 1: 15

GRAPHIC SCALE
500 0 500
SCALE: 1: 15

GENERAL NOTES:

1. RETAINING WALLS SHALL BE CONSTRUCTED OF TREATED TIMBERS AND SECURED WITH #16 DEFORMED STEEL REINFORCING BARS DRIVEN VERTICALLY THROUGH FIELD-DRILLED HOLES. THE BARS SHALL HAVE A MINIMUM LENGTH OF 825 mm AND SHALL BE LOCATED TO SECURE TIMBER ENDS AND ON A 610 mm SPACING.
2. SEE SHEET C-131 FOR HORIZONTAL AND VERTICAL CONTRO
3. SEE GENERAL SITE PLAN SHEETS C-003 THRU C-025 FOR TARGET LAYOUT.
4. SEE SHEET CD-007B FOR COVER DETAIL.
5. ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

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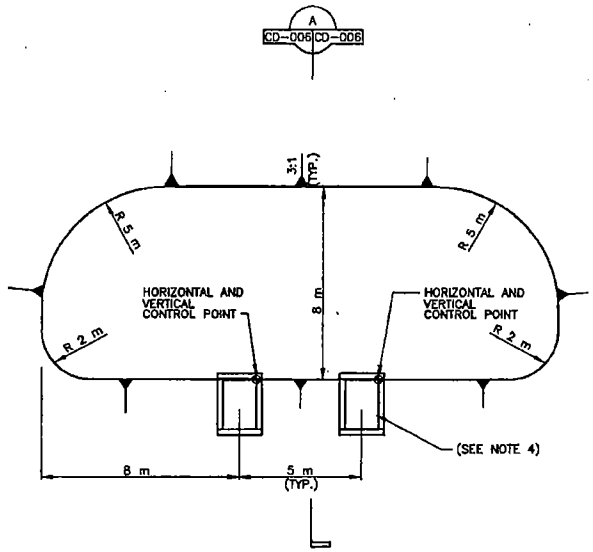
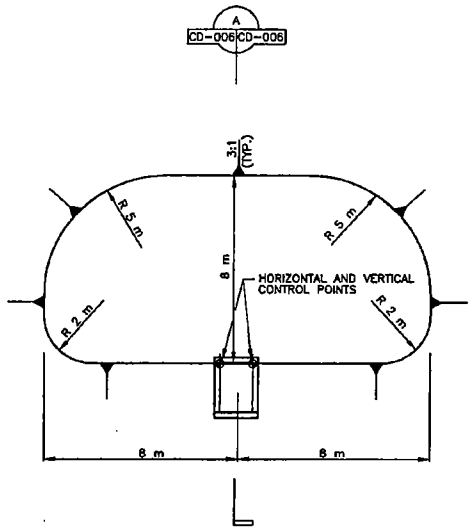
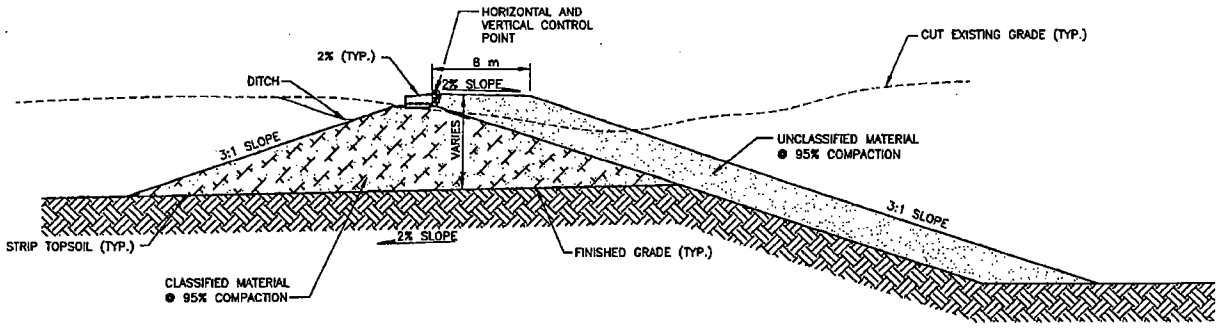


2-MAN LINEAR
STATIONARY INFANTRY TARGET
SCALE: 1: 100



SINGLE MAN
STATIONARY INFANTRY TARGET
SCALE: 1: 100



A
CD-006 CD-006
SECTION
SCALE: 1: 200

NOTE:

ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

STATIONARY INFANTRY TARGET (SIT)
EMPLACEMENT AND SECTION
SINGLE MAN AND 2-MAN (LINEAR)

Reference number:
CD-006
Sheet 240 of

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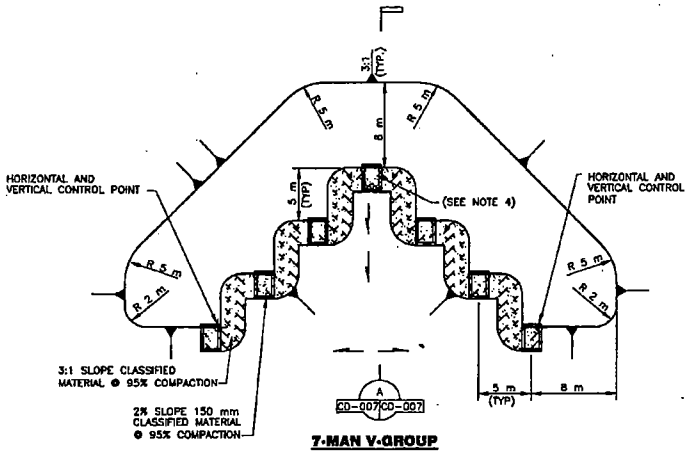
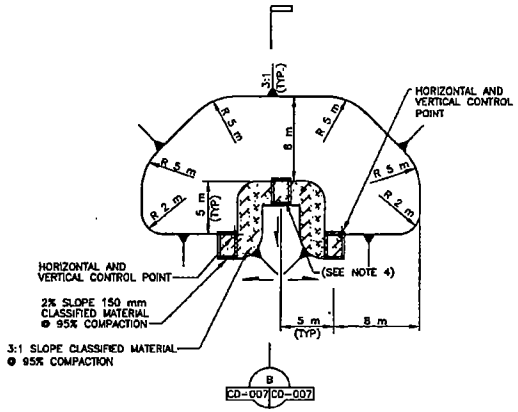


7-MAN V-GROUP

STATIONARY INFANTRY TARGET

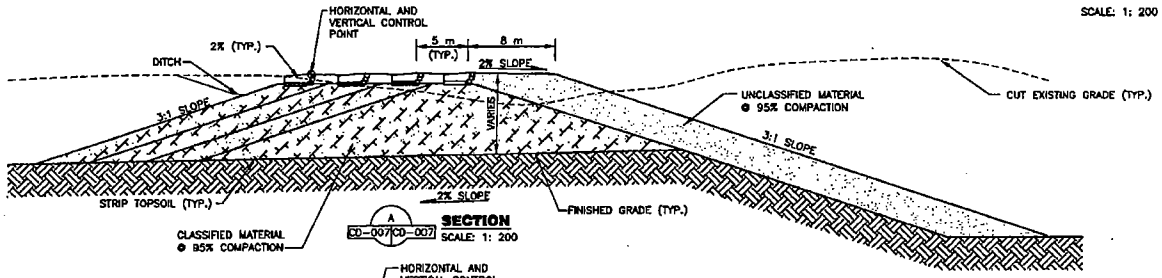
SCALE: 1: 200



3-MAN V-GROUP

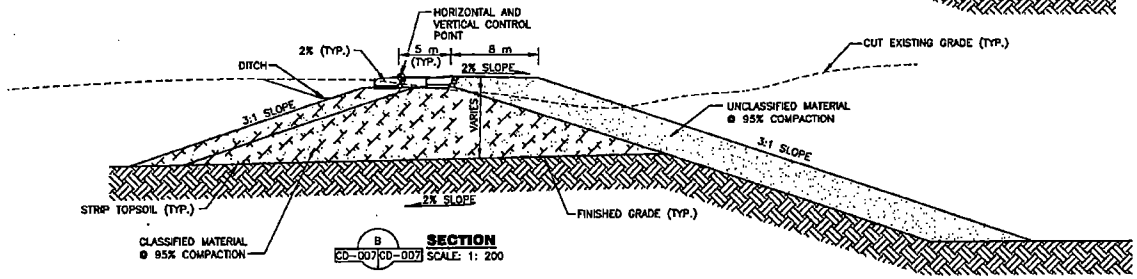
STATIONARY INFANTRY TARGET

SCALE: 1: 200



SECTION

SCALE: 1: 200



SECTION

SCALE: 1: 200

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (OTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

STATIONARY INFANTRY TARGET (SIT)
DESCENDING EMPLACEMENT
7-MAN AND 3-MAN (V GROUP)

Reference number:

CD-007

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GENERAL NOTES:

1. SEE SHEET C-131 FOR HORIZONTAL AND VERTICAL CONTROL DATA.
2. SEE ELECTRICAL SHEETS FOR DETAILS OF THE CABLE JUNCTION BOX
3. SEE GENERAL SITE PLAN SHEETS C-003 THRU C-025 FOR TARGET LAYOUT.
4. IF 3-MAN AND/OR 7-MAN V-GROUP SITs REQUIRE INFANTRY HOSTILE FIRE SIMULATORS, THE CENTER (POINT MAN) EMPLACEMENT WILL BE USED. SEE SIT w/ HOSTILE FIRE SIMULATOR DETAIL ON SHEET CD-005.
5. ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS OTHERWISE NOTE

GRAPHIC SCALE

4000 0 4000

SCALE: 1: 200

United States Army Alaska

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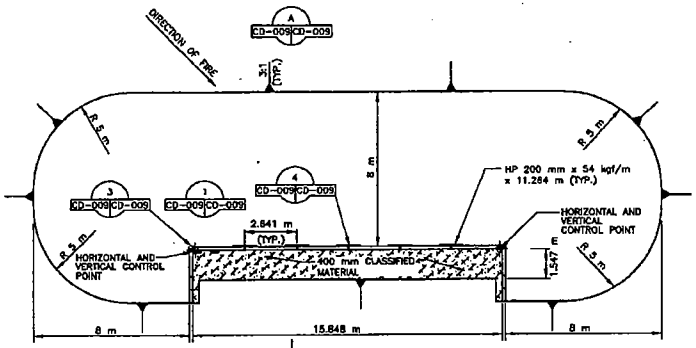
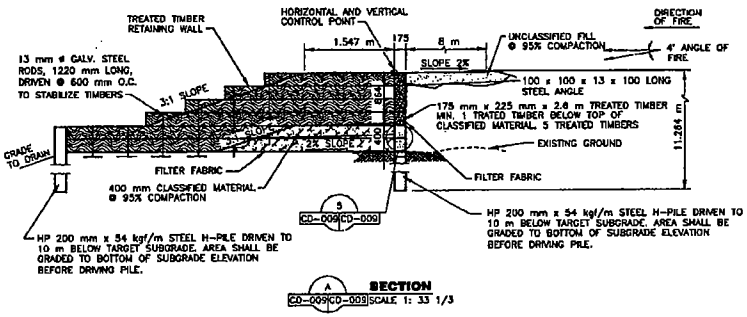
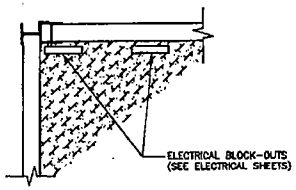


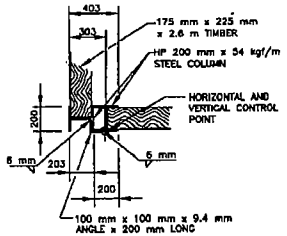
PLAN
SURFACE / FILL PLACEMENT
MOVING INFANTRY TARGET
SCALE: 1: 100



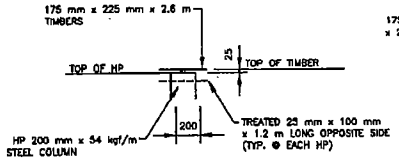
SECTION
CD-009|CD-009 SCALE 1: 33 1/3



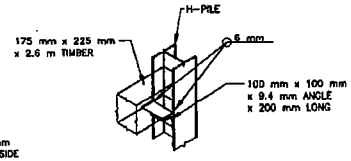
DETAIL
CD-009|CD-009 SCALE 1: 20



DETAIL
CD-002|CD-009
CD-003
CD-004
CD-009
CD-010
SCALE 1: 20



DETAIL
CD-003|CD-009
CD-003
CD-004
CD-009
SCALE 1: 20



DETAIL
CD-003|CD-009
CD-004
CD-009
SCALE 1: 20

GENERAL NOTES:

1. MOVING INFANTRY TARGET TRACK AND MECHANISM PROVIDED BY OTHERS.
2. AREA DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED CONSISTENT WITH THE NATURAL SURROUNDINGS. GROUND COVER SHALL NOT REDUCE TARGET VISIBILITY.
3. THE EMPLACEMENT MAY BE REVERSED OR MIRRORED FROM WHAT IS SHOWN HERE.
4. RETAINING WALLS SHALL BE CONSTRUCTED OF ADEQUATELY CONNECTED TIMBERS (MAY BE PREFABRICATED). FILTER FABRIC SHALL BE INSTALLED BEHIND ALL WOOD RETAINING WALLS. FABRIC SHALL EXTEND THE FULL HEIGHT OF THE WALL.
5. SEE GENERAL SITE PLAN SHEETS C-003 THRU C-025 FOR TARGET LAYOUT.
6. SEE SHEET C-131 FOR HORIZONTAL AND VERTICAL CONTROL DATA.
7. ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

GRAPHIC SCALES

400 200 0 200 400
SCALE: 1: 20

1000 0 500 1000
SCALE: 1: 33-1/3

2000 0 2000
SCALE: 1: 100

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (OTA)
BATTLE AREA COMPLEX (BAX)
FN 53401 FY 04

MOVING INFANTRY TARGET (MIT)
EMPLACEMENT, SECTIONS AND DETAILS

Reference number:
CD-009
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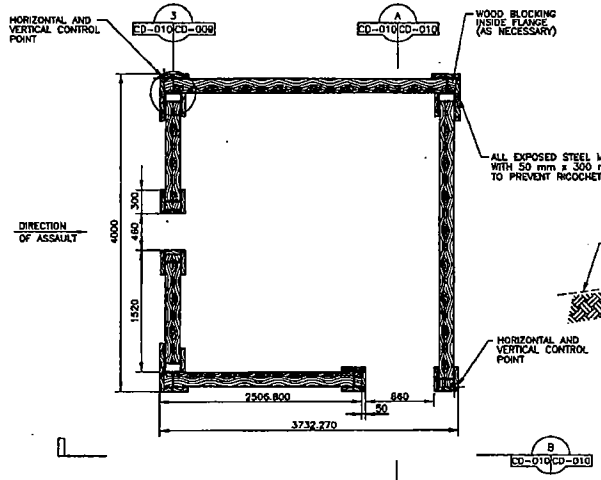
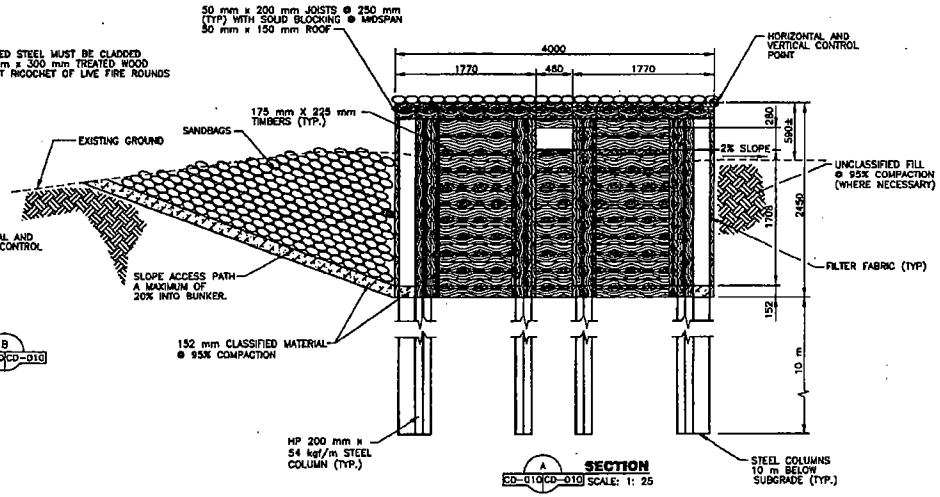


PLAN

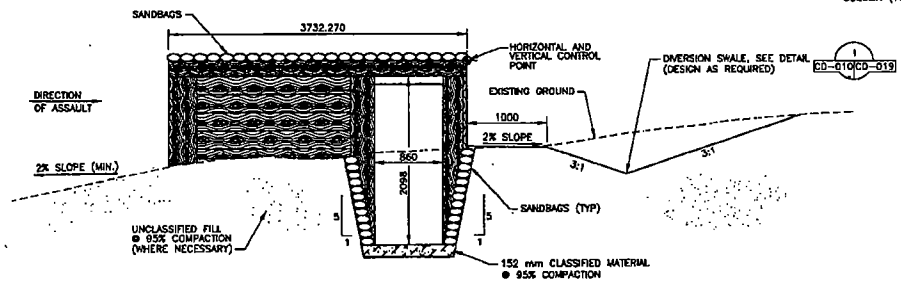
MACHINE GUN/OBSERVATION BUNKER

SCALE: 1: 25



SECTION

A CD-010 CD-010 SCALE: 1: 25



6 CD-010 CD-010 **SECTION**

(RIGHT SIDE ENTRANCE)

MACHINE GUN/OBSERVATION BUNKER ENTRANCE

SCALE: 1: 25

GENERAL NOTES:

1. WALLS AND ROOF SHALL BE CONSTRUCTED OF TREATED TIMBERS.
2. FILTER FABRIC SHALL BE INSTALLED ABOVE ROOF AND BEHIND ALL WOOD WALLS BELOW GRADE.
3. AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED OR RESURFACED CONSISTENT WITH THE NATURAL SURROUNDINGS. GROUND COVER SHALL NOT REDUCE TARGET VISIBILITY.
4. SEE GENERAL SITE PLAN SHEETS C-003 THRU C-025 FOR TARGET LAYOUT.
5. SEE SHEET C-133 FOR HORIZONTAL AND VERTICAL CONTROL POINT DATA.
6. ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

GRAPHIC SCALE

500 0 500

SCALE: 1: 25

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

MACHINE GUN/OBSERVATION BUNKER

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

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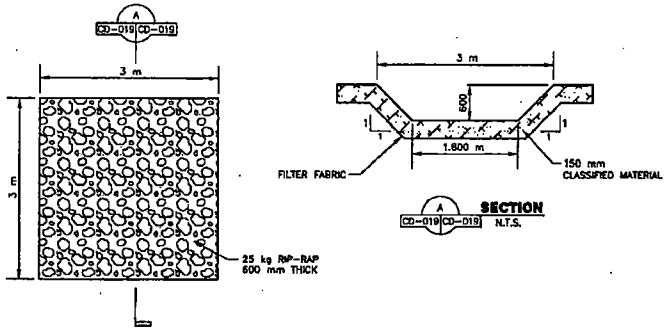
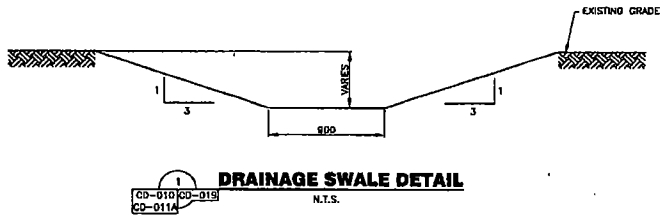
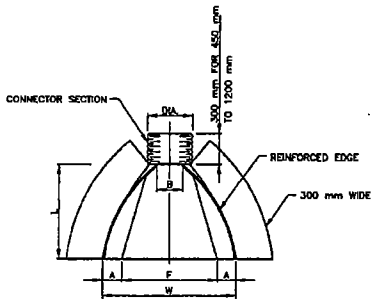


RIP-RAP PAD
N.T.S.

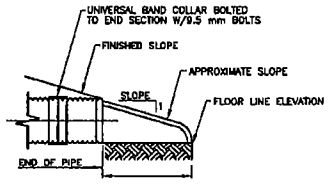


DRAINAGE SWALE DETAIL
N.T.S.

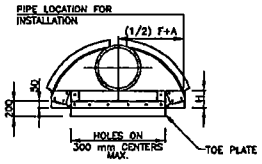
NOTE:
DRAINAGE SWALES ARE TO BE INSTALLED BEHIND TARGETS AND ALONG PIPE INLET/OUTLET AS NEEDED TO TIE TO GRADE. SWALE SHALL BE ARMORED WITH EROSION CONTROL MAT IF GRADE EXCEEDS 2%.



PLAN



TYPICAL CROSS SECTION



ELEVATION

FABRICATED CM FLARED END PIPE SECTION

PIPE DIA. (mm.)	SPECIFIED THICKNESS (mm.)	A MIN. (mm.)	B MAX. (mm.)	H MIN. (mm.)	L ± 2 (mm.)	W MAX WIDTH (mm.)	APPROXIMATE AVERAGE END SECTION SLOPE
450	1.321	200	200	150	790	965	2 1/2
600	1.321	250	300	150	1040	1270	2 1/2
750	1.321	250	325	200	1300	1500	2 1/2
900	1.321	310	318	225	1520	1880	2 1/2
1200	1.628	430	740	300	2000	2340	2 1/4

NOTES:

1. TOE PLATES SHALL BE PUNCHED TO MATCH HOLES IN APRON LIP. ATTACH WITH 9.5 mm GALVANIZED BOLTS.
2. CONNECTOR SECTION, CORNER PLATE, AND TOE PLATE SHALL BE SAME THICKNESS AND MATERIAL AS APRON.
3. OTHER APPROVED DESIGNS MAY BE USED IN LIEU OF THE TYPE SHOWN.
4. ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

US ARMY CORPS
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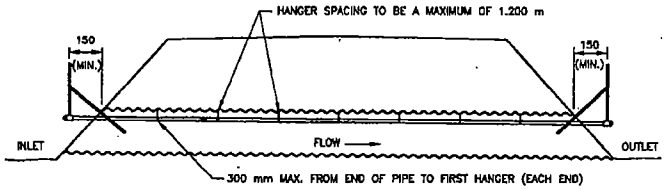
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

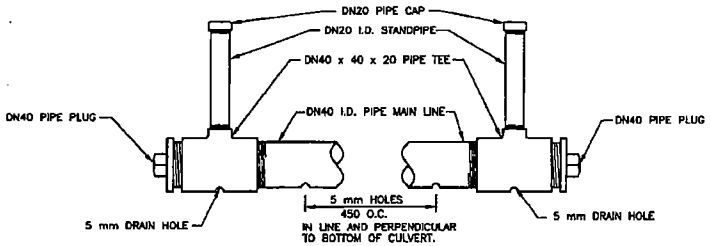
DRAINAGE DETAILS

Reference number:
CD-019
Sheet 258 of



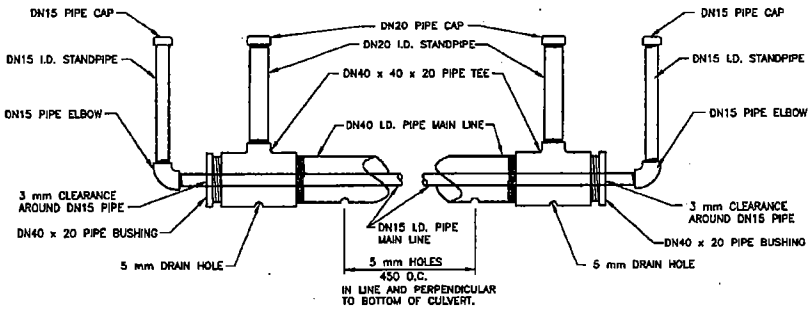
LOCATION OF THAW PIPE

N.T.S.



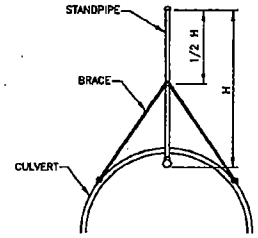
STANDARD SINGLE THAW PIPE

N.T.S.



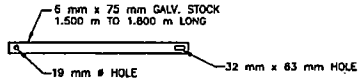
DOUBLE THAW PIPE

N.T.S.



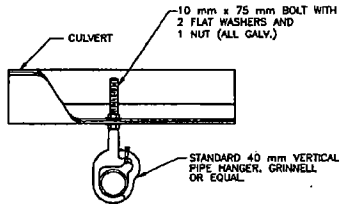
LOCATION OF STANDPIPE BRACE

N.T.S.



STANDPIPE BRACE DETAIL

N.T.S.



THAW PIPE HANGER DETAIL

N.T.S.

NOTES:

1. ALL CULVERTS INSTALLED ON THIS PROJECT SHALL BE FITTED WITH A CULVERT THAW PIPE.
2. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE STATE OF ALASKA, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
3. HEIGHT OF ALL STANDPIPES TO BE 1/2 THE HEIGHT OF CULVERT COVER OR 1.500 m WHICHEVER IS LESS.
4. 13 mm MAIN LINE AND STANDPIPES TO BE LIQUID TIGHT AND FILLED WITH 50/50 ANTIFREEZE.
5. STANDPIPE BRACES TO BE FIELD BENT AND ATTACHED TO CULVERT WITH STANDARD STRUCTURAL PLATE PIPE BOLTS.
6. 13 mm THAW PIPE SHALL BE BRACED AS SHOWN ABOVE.
7. ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

US ARMY CORPS
OF ENGINEERS
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

CULVERT THAW PIPE

Reference number:

CD-019A

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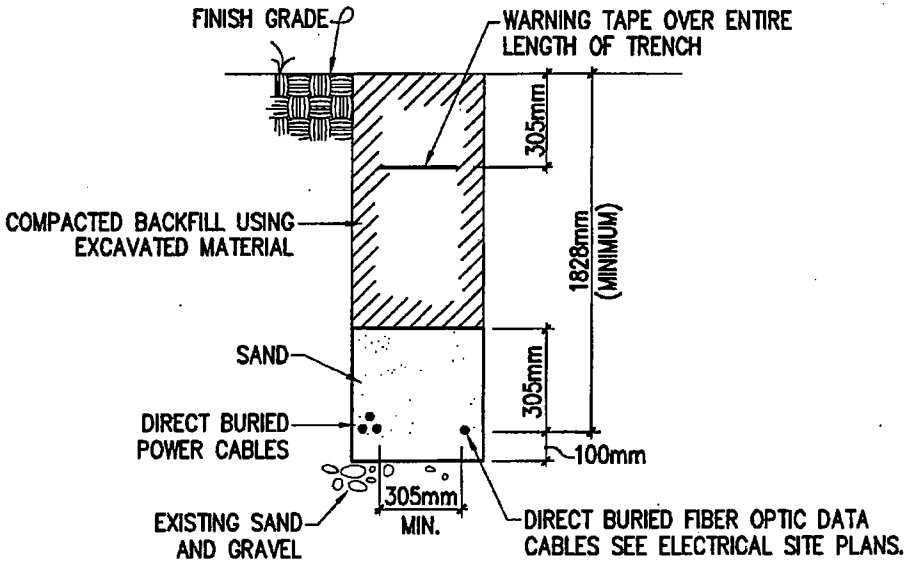


TYPICAL TRENCH DETAIL
PRIMARY POWER & FIBER OPTIC DATA CABLE

NOT TO SCALE

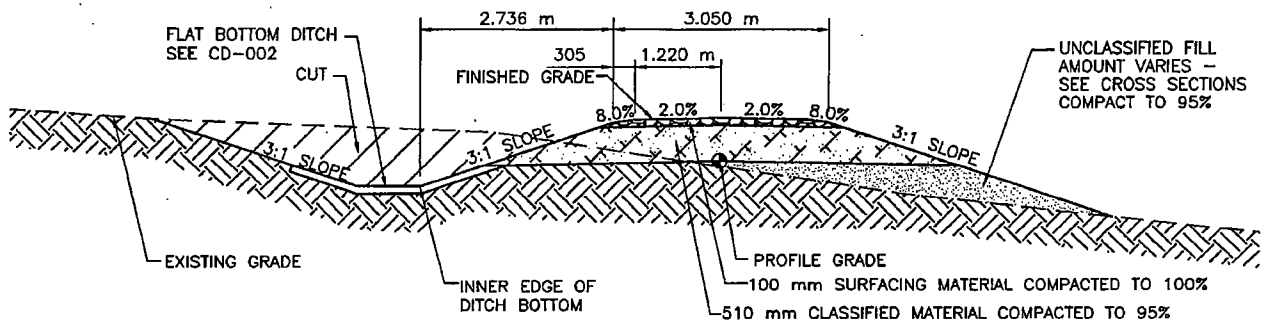
US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA (DTA)
BATTLE AREA COMPLEX (BAX)
PN 53401 FY 04

ELECTRICAL POWER DISTRIBUTION
SITE PLAN

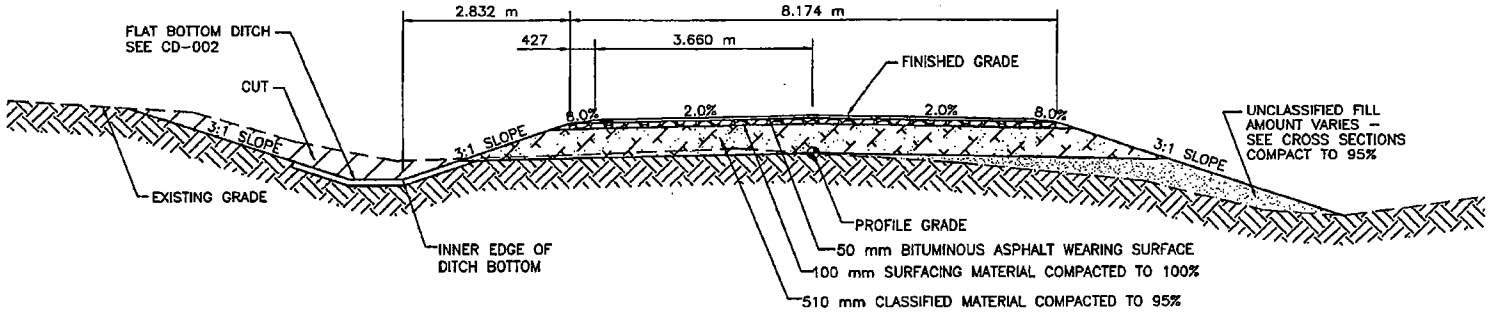
Reference number:
E-003
Sheet 320 of

Combined Arms Collective Training
Facility Roads
See Sheet 9 of 27



MILLERS BOB AVENUE

SCALE: 1: 50



GLAZE SPIRE ROAD STA. 0+442.190 TO STA. 0+904.382

SCALE: 1: 50

US ARMY CORPS
OF ENGINEERS
ALASKA DISTRICT

FT. WAINWRIGHT, ALASKA
COMBINED ARMS COLLECTIVE TRAINING FACILITY
PN 56693 FY 04

TYPICAL ROADWAY SECTIONS

Reference number:

CD-001

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United States Army Alaska
POA-2005-164-4
March 2006

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT (33 CFR 325)	OMB APPROVAL NO. 0710-0003 Expires December 31, 2004

The Public burden for this collection of information is estimated to average 10 hours per response, although the majority of applications should require 5 hours or less. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research and Sanctuaries Act, 33 USC 1413, Section 103. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED
POA 2005-614-4	CEPOA-CO-R-NF	03/07/06	03/13/06

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required)
Mr. Thomas Glaze Project Manager, Directorate of Public Works	Ms. Ellen M. Clark, ITAM Coordinator
6. APPLICANT'S ADDRESS	7. AGENT'S ADDRESS
DIRECTORATE OF PUBLIC WORKS ATTN: IMPA-FRA-PWF (TOM GLAZE) 724 POSTAL SERVICE LOOP # 4500 FORT RICHARDSON, ALASKA 99505-4500	P.O. BOX 1291 DELTA JUNCTION, ALASKA 99737
7. APPLICANT'S PHONE NOS. W/AREA CODE	10. AGENT'S PHONE NOS. W/AREA CODE
a. Residence b. Business (907) 384-0865	a. Residence b. Business (907) 873-1614

RECEIVED
MAR 13 2006
CEPOA-CO-R-N-FFO
Alaska District, Corps of Engineers

11. STATEMENT OF AUTHORIZATION

I hereby authorize Ellen M. Clark to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

APPLICANT'S SIGNATURE Thomas Glaze DATE 6 Mar 06

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE *(see instructions)*

Construction of a Combat Training Facility at Donnelly Training Area

13. NAME OF WATERBODY, IF KNOWN *(if applicable)*	14. PROJECT STREET ADDRESS *(if applicable)*
Jarvis Creek	N/A

15. LOCATION OF PROJECT

N/A	AK
COUNTY	STATE

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)

Please see attached location descriptions and maps.

17. DIRECTIONS TO THE SITE

Head south <1/4 mile past Delta Junction on the Richardson Hwy and turn east onto 33-Mile Loop Rd, prior to crossing Jarvis Creek. Follow 33-Mile Loop Road south about 4 miles through Buffalo Drop Zone and continue on about 4 more miles to the Eddy Drop Zone area.

18. Nature of Activity *(Description of project, include all features)*

Please see attached descriptions of project components.

19. Project Purpose *(Describe the reason or purpose of the project, see instructions)*

The purpose of the project is to provide year-round, fully automated, comprehensive, and realistic training and range facilities which would support combat team training events. Current facilities do not provide the same level of training realism and effectiveness required for combat readiness of deploying USARAK soldiers. Construction would begin in October 2006 with a completion date of September 2008. Additional information can be found in the SDEIS available on the USARAK Conservation website: http://www.usarak.army.mil/conservation/.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Gravel fill material is required to provide structurally stable target arrays and roads. Sand or gravel fill material is included in the direct-buried utility trenches. Incidental side cast materials may be placed in wetlands when unavoidable.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

169,595 CY of clean sand and gravel materials.

22. Surface Area in Acres of Wetlands or Other Waters Filled *(see instructions)*

26 acres filled. Please see attached tables for details.

23. Is Any Portion of the Work Already Complete? Yes _____ No ___X___ IF YES, DESCRIBE THE COMPLETED WORK

24. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

The project is well within the 661,381 acres of land that comprise the Donnelly Training Area (DTA). These are withdrawn public lands established under the Military Lands Withdrawal Act (Public Law 106-65). Adjoining DTA are other federal lands, ANILCA native land allocations, state and private lands.

25. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
None					

*Would include but is not restricted to zoning, building and flood plain permits

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE
	6 Mar 06	Ellen M. Clark	6 Mar 06

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

INTRODUCTION

United States Army Alaska (USARAK) proposes to construct and to operate a state-of-the-art, fully automated and instrumented combat training facility on Donnelly Training Area, (DTA) Alaska (Sheet 1). The construction site is in the Eddy Drop Zone area of DTA East. The project involves the construction and operation of a Battle Area Complex (BAX) (Sheet 2) and a Combined Arms Collective Training Facility (CACTF) (Sheet 3). These facilities would support a wide range of training exercises under realistic rural (BAX) and urban (CACTF) combat conditions for up to 1,000 personnel and 170 combat vehicles per training event.

The selection of the Eddy Drop Zone site, evaluated in the SDEIS, minimizes the overall impact to wetlands because this area has fewer wetlands than the other alternatives. In addition, the layout of the CACTF, which has more design flexibility, was shifted to avoid most wetlands. Please refer to the SDEIS for more information on the evaluation of the other alternatives.

LOCATION DESCRIPTION

Legal descriptions from USGS Quad maps Mt. Hayes D-4 and Big Delta A-4 for construction locations of the Combat Training Facility components (Fairbanks Meridian):

Battle Area Complex

Township	Range	Section
T11S	R11E	21, 22, 27, 28, 29, 33, 34

Approximately Latitude 63° 56' N., Longitude 145° 36' W.

Combined Arms Collective Training Facility

Township	Range	Section
T11S	R11E	8, 17

Approximately Latitude 63° 58' N., Longitude 145° 38' W.

33 Mile Loop Road

Township	Range	Section
T10S	R10E	25, 26, 36

From Latitude 64° 01' 30" N., Longitude 145° 44' 00" W. to the CACTF site.

PROJECT DESCRIPTION

The combat training facility range designs include the larger BAX, with a Range Operations and Control Area (ROCA), and the smaller CACTF. These components are listed in detail below. Simplified footprints of the BAX and CACTF layouts are shown on Sheets 2 and 3.

Battle Area Complex (BAX)

The main area of overall impacts and impacts to wetlands will be at the BAX construction site. This is the rural portion designed for individual vehicle gunnery training and qualification of vehicle-mounted weapon systems, and weapons training on foot. The BAX will provide a useable range area for free maneuver of approximately 3,500 acres.

The BAX design includes two hardened course roads, stationary and moving armor and infantry targets, machine gun bunkers, breaching obstacles, and indirect fire simulation devices. All targets would be fully automated, and would be computer operated and scored from a centralized control facility.

The BAX portion of the design also includes an adjacent joint-use Range Operations and Control Area (ROCA) (Sheet 3), which will include a fenced ammunition breakdown building with a loading dock, a fenced operations and storage building, restroom facilities, an enclosed observation area, a covered cooking area, building information systems, a water system, and storm drainage features.

Clearing will be conducted in some locations for line-of-sight from firing points to targets. Not all of the vegetation would be cleared in order to maintain varying degrees of natural overhead protection and concealment and to provide natural topography. Within this CWA Section 404 permit application, clearing is defined as the mechanical cutting or shearing of large, woody vegetation to within 6 inches of ground level, and leaving the surface organic material and ground intact.

The footprints of the range roads, ditches, buildings, targets and other permanent facilities will be cleared and grubbed. Grubbing will include the mechanical clearing of vegetation and the removal and disposal of stumps, large roots, and other debris not suitable for foundation purposes to a depth of not less than 18 inches. This overburden material will be mechanically sorted so that the plant materials can be chipped and used on the side slopes of the targets for stabilization and to protect against ammunition ricochet. The remaining non-organic materials will be back-hauled to the gravel pit for disposal, which is an upland location (Sheet 3).

Selective forest thinning will also be conducted in bands, or zones, in front of some target clusters. This will allow for visibility of the targets as the Soldiers maneuver down the range. The zones differ in percentage of trees and brush less than 6" diameter at breast height (dbh) removed, and range from 25% to 75% removal. Trees will be marked ahead of time and supervised by the proponent. Thinning is to be conducted so as not to disturb the ground surface or vegetative mat. The goal is to leave it as natural as possible.

A fuel break will be constructed as shown on (Sheet 4). It will utilize existing clearings, Jarvis Creek and previously burned areas as much as possible. The rest of the fuel break will be a 75-foot wide clearing using a hydroaxe in the black spruce and other forest types. This fuel break will cross 4 sections of wetlands (for a total of 2962 feet by 75 feet, or 5.1 acres), which may experience disturbance to the organic mat and/or ground.

Table 1 shows the total acres of construction fill for the entire project. Table 2 shows the total acres of construction fill by type of construction activity.

Combined Arms Collective Training Facility (CACTF)

There will be a small amount of wetlands disturbance and fill at the CACTF construction site. This is the urban component of the range complex that will contain several structures designed to provide a high level of urban combat training realism and effectiveness. This facility would support mounted (by vehicle) and dismounted (on foot) training operations. The CACTF requires approximately 1,100 acres of land suitable for construction of buildings and support features.

The CACTF design would include electrical service, site improvements, such as curbs, drainage, contouring the land and reseeding, and data information systems. A total of 24 buildings would be constructed, with improved roads, sidewalks, and an underground tunnel system.

Table 1 shows the total acres of construction fill for the entire project. Table 2 shows the total acres of construction fill by type of construction activity.

PROJECT MITIGATION

USARAK has evaluated the potential impacts to wetlands from the construction of the Combat Training Facility at Donnelly Training Area. Different alternatives were considered, from general site selection to specific facility locations. Construction methods have also been selected that will minimize the impacts to wetlands. The following specific items will be implemented:

During Construction:

- Conduct vegetation clearing operations in a manner that does not disturb the organic mat or ground surface.
- Limit grubbing operations (mechanized land clearing) to just the filled or excavated areas.
- Conduct thinning operations by hand in order to prevent wetland impacts.
- Do not conduct clearing, grubbing or thinning during 1 May – 15 July.
- Construct the fuel break in a way that utilizes existing natural and man-made barriers in order to minimize the amount of new clearing required.

During Range Operation:

- Use the Range and Training Land Assessment (RTLA) program and the Land Rehabilitation and Maintenance (LRAM) program to inventory land conditions, monitor vegetation trends, repair damaged areas, and minimize future damage during operations.
- Continue use of the environmental limitations overlays for planning military training activities within the range complex and minimizing wetland damage.

ADDITIONAL WORK NOT REQUIRING A DEPARTMENT OF THE ARMY PERMIT

1. Access to the site will be east and south from the Richardson Highway via 33 Mile Loop Road, an all-season gravel road. Upgrades are not explicitly called for in the range design documents; however, the contractor may choose to improve the road within its existing footprint. It will not be widened. This portion of 33 Mile Loop Road does not cross wetlands.

2. Electrical power distribution will be provided to the site by approximately 156 power poles (overhead 3-phase primary) and some underground lines (direct buried 3-phase primary). The poles and underground portions will be located on the same side (to the south or west) of 33 Mile Loop Road for the entire distance. No part of the power distribution route will cross wetlands. Three power poles will be placed above the ordinary high water line of Jarvis Creek, but within the riparian zone (within 33 feet) of Jarvis Creek. The power line cannot be re-routed to the north side of the road because it would be unsafe to have military vehicles passing under the lines. Minimal tree trimming and disturbance for placing the poles will occur. Utility line placement within the BAX and CACTF ranges are discussed in the Additional Information section.

3. Some of the small targets will not have permanent service roads. Clearing will be conducted on the shortest line from the main road to the target in order to access the site for initial construction. Grubbing will not be done for these access trails, and the contractor will not disturb the vegetative mat in wetland locations. Future access for maintenance will be done on foot or ATV.

4. The material site (gravel pit) is located in uplands between Buffalo Drop Zone and the CACTF construction site, along 33 Mile Loop Road. (Sheet 3).

5. There will be a contractor office site and laydown yard, which will be located in uplands between the CACTF and BAX (Sheet 3).

TABLES

Table 1. Summary of Project Impacts by Component

Combat Training Facility Component	Total Construction Footprint (Acres)	Total Fill (CY)	Wetland Acres Filled and/or Mechanically Cleared	Fill in Wetlands (CY)
BAX	500*	420,000	24	166,505
CACTF	79	88,000	2	3,090
Power Pole Installation	<1	118	0**	0**
Total	579	508,118	26	169,595

* includes the fuel break.

**3 poles will be placed in a riparian zone near Jarvis Creek. For installation of these 3 poles, <0.001 acre will be impacted by the auger itself, while a slightly larger area (up to 0.001 acres) may be disturbed by the construction vehicle.

Table 2. Impacts of Construction Categories by Type.

Construction Activity	Total Construction Footprint (Acres)	Total Fill (CY)	Wetland Acres Mechanically Cleared, no ground disturbance	Wetland Acres Filled and/or Mechanically Cleared and Grubbed	Fill in Wetlands (CY)
Roads	53	241,000	0	17	110,263
Target Arrays	48	153,000	0	2	34,864
Building Pads	5	114,000	0	0	0
Utilities within the Ranges	*	*	0	2	24,468
Power Pole Installation	<1	118	0	0	0
Clearing	551**	0	77	0	0
Fuel Break	28 acres hydroaxed*** + 3 acres thinned	0	0	5	Incidental disruption of ground surface
Total	579	508,118	77	26	169,959

*Disturbance for utilities is included in the construction footprints of roads and other improvements.

**Clearing areas include Roads, Target Arrays, Building Pads, and Utilities.

***Masticating head hydroaxe will be used.

FIGURES

ABBREVIATIONS

BES	Battle Effects Simulator
CMP	Corrugated Metal Pipe (Culvert)
FC	Flir Camera
FP	Firing Position
MAT	Moving Armor Target
MIT	Moving Infantry Target
MGB	Machine Gun Bunker
PC	Down Range Power Center
PTSR	Primary Target Service Road
SAT	Stationary Armor Target
SIT	Stationary Infantry Target
STSR	Secondary Target Service Road
TR	Trench